

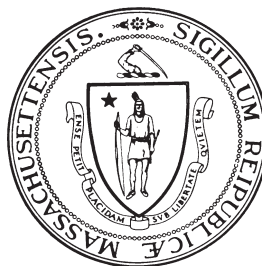
Massachusetts Division of Health Care Finance and Policy

Massachusetts HMO Rate Analysis

Spending and Utilization in 2000, 2001, 2002 (budgeted), and 2003 (projected)

December 2002

Linda Ruthardt, Commissioner



Jane Swift, Governor
Commonwealth of Massachusetts

Robert P. Gittens, Secretary
Executive Office of Health and Human Services

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A Word About the Division

The Division of Health Care Finance and Policy collects, analyzes and disseminates information with the goal of improving the quality, efficiency and effectiveness of the health care delivery system in Massachusetts. In addition, the Division administers the Uncompensated Care Pool, a fund that reimburses Massachusetts acute care hospitals and community health centers for services provided to uninsured and underinsured people.

Satisfying the Need for Health Care Information

The effectiveness of the health care system depends in part upon the availability of information. In order for this system to function properly, purchasers must have accurate and useful infor-

Mission

To improve the delivery and financing of health care by providing information, developing policies, and promoting efficiencies that benefit the people of Massachusetts. Agency goals:

- Assure the availability of relevant health care delivery system data to meet the needs of health care purchasers, providers, consumers and policy makers;
- Advise and inform decision makers in the development of effective health care policies;
- Develop health care pricing strategies that support the cost effective procurement of high quality services for public beneficiaries; and
- Improve access to health care for low-income uninsured and underinsured residents.

mation about quality, pricing, supply and available alternatives. Providers need information on the productivity and efficiency of their business operations to develop strategies to improve the effectiveness of the services they deliver. State policy makers need to be advised of the present health care environment, as they consider where policy investigation or action may be appropriate.

As part of its health care information program, the Division publishes reports that focus on various health care policy and market issues.

Introduction

This report presents standardized measures for expenses and health care utilization that will allow readers to make comparisons across HMOs. It is designed to assist purchasers understand where health care dollars are spent, and therefore provide a foundation for negotiating costs and services with health plans. Understanding the foundation for HMO rate calculations will help purchasers ask more knowledgeable questions about the adjustments used to arrive at specific premiums during the contracting process.

[Note: Remember that differences between health care expenses for your organization and those listed in this report may reflect differences in benefits, the health of a population, and claims history/experience.]

This year's report differs from earlier versions which were created with information provided by every HMO in the Commonwealth in response to a questionnaire from the Massachusetts Healthcare Purchaser Group (MHPG) and the Division of Health Care Finance and Policy (DHCFP). This year, neither DHCFP nor the MHPG sent questionnaires to health plans. Instead, information that health plans submitted to the Group Insurance Commission (GIC) as part of the GIC's annual rate renewal process was used. The GIC is a quasi-independent state agency that purchases health insurance and other benefits for Commonwealth of Massachusetts employees and retirees, and their dependents and survivors. The GIC also covers personnel of housing and redevelopment authorities, as well as retired municipal employees, and teachers in certain governmental units. More information on the GIC is described in the section titled Data Caveats.

How to Use this Report

This report describes, for each of seven HMOs, actual (2000 and 2001), budgeted (2002), and projected (2003) expenses and utilization for particular services or groups of services. As you look at this report in preparation for selecting or negotiating with one or more health plans, ask yourself the following questions:

- How did an HMO's expenses and utilization of services change from 2000 to 2001? How much are plans projecting expenses and utilization to change from 2001 to 2003 (remember to divide this number by 2 to estimate an annual rate of change)?
- In addition to looking at an individual plan's trends, compare them with one another. Consider how expenses and utilization differ among plans. Costs may be lower in one plan than another, even though the lower-cost plan has a higher rate of increase.
- Can a plan suggest ways to decrease your costs and/or improve the health status of your employees?
- Are there people, or their dependents, in your business who could benefit from a disease management program, which might cost more now but save money later? Would it be worthwhile for your business to seek help, for example, from an independent disease management or utilization review company?
- Do some plans have more effective or efficient care management strategies?
- How do plans pay for their activities to comply with the federal Health Insurance Portability and Accountability Act (HIPAA)? Do you pay an additional amount for this? If so, do you pay more or less than other health plan customers?
- Your benefits may differ from a plan's average benefits, so you should expect corresponding differences in the premiums you pay. Can your plan describe the differences satisfactorily to you?

Data Caveats



Massachusetts *HMO Rate Analysis* (2002) presents information from seven prominent Massachusetts health insurers: Aetna/US HealthCare, CIGNA, Fallon Community Health Plan, Harvard Pilgrim Health Care, Health New England, Neighborhood Health Plan, and Tufts Health Plan. These plans reported their experiences over four years, from 2000-2003, according to the state fiscal year (July 1-June 30). An exception was Tufts Health Plan, which reported calendar year data. Tufts numbers also differ from the others for several reasons: 1) its 2000 and 2001 numbers are GIC specific and 2) its 2002 and 2003 estimates are based upon Tufts' fully insured book of business. Consequently, Tufts' trends that include data that crosses #1 and #2 are affected by two variables: changes over time, and differences between the GIC experience and Tufts' book of business.

The plans' reports are not audited, although GIC staff and its consultants reviewed the numbers for reasonableness. Data used for this report only include the community rated expenses and hospital utilization for the fully insured HMO populations that these plans serve in Massachusetts (except for Tufts, as noted above). These HMOs may also sell other products, such as preferred provider organization products and third-party administrative services to employers who are self-funded.

Blue Cross and Blue Shield and United both sell HMO products in Massachusetts, but do not contract with the GIC, and therefore did not submit rate renewal data to the GIC. Both plans were given the opportunity to submit information for this report and declined.

Data included within this report should be used with caution. Health plans submit actual and projected expenses on a per member per month (PMPM) basis. However, this report does not control for the different methodologies used by health plans that may adjust for factors such as age, sex, industry, geography, and experience to derive actual premium rates. If a plan did not submit a data element, no bar will appear in the corresponding graph. If a plan described its method of reporting that was different from the way the GIC data requested it, it is noted. In these instances, a plan's data may be either omitted from or included in the averages and ranges for all plans.

Actual versus Projected Numbers

Table 1 compares plans' actual total expenses in 2001 with 2001 projected (in 2000) total expenses. This will give a sense of how accurate the plans' projections were in 2000. Health plans' methods to predict future costs and utilization may vary by category within plans, among plans, and even from year to year within one category of a plan.

Table 1: HMOs' Projected and Actual Total Expenses PMPM and Percent Change from 2000 to 2001

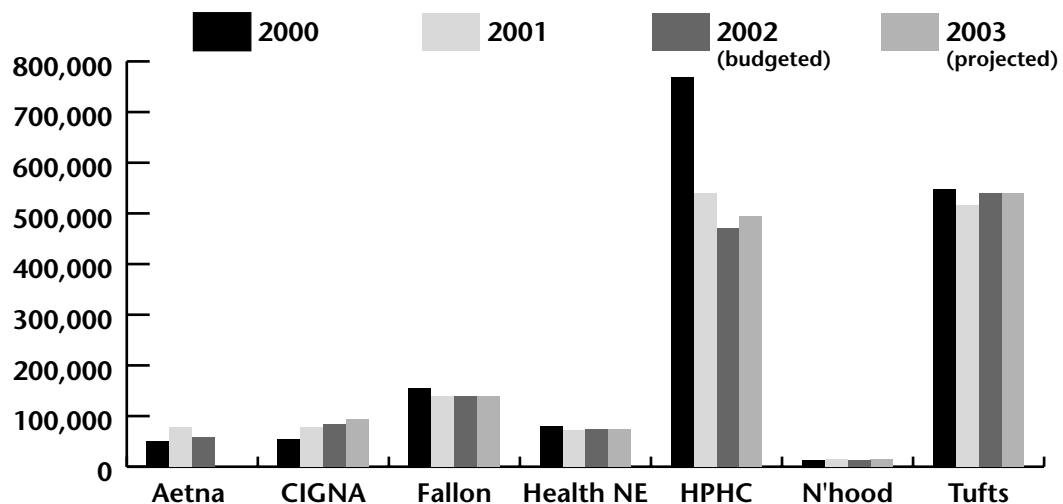
| HMO | 2001 Budgeted Expenses | Projected Percent Change from 2000 | Actual 2001 Costs | Actual Percent Change from 2000 |
|----------------|------------------------------|--|-------------------------|---------------------------------------|
| Aetna | 263.56 | 11% | 263.56 | 11% |
| CIGNA | 167.16 | 12% | 170.16 | 14% |
| Fallon | 162.00 | 9% | 165.43 | 12% |
| Health NE | 183.67 | 2% | 195.15 | 8% |
| HPHC | 193.24 | 13% | 192.51 | 13% |
| Neighborhood | 183.32 | 8% | 170.07 | 1% |
| Tufts | 195.80 | 16% | 187.27 | 11% |
| Median | 183.67 | 11% | 187.27 | 11% |
| Average | 192.68 | 10% | 192.02 | 10% |

Membership

In 2001, the sum of all fully insured HMO enrollees was 1,559,326 across the seven profiled plans, a 13 percent decrease from 2000 (see Figure 1).

The decreasing number of enrollees supports the perception that closed-panel managed care products' popularity continues to wane. Losses in HMO enrollment may be a result of subscribers selecting less restrictive health plan products or an increase in enrollment in employer self-insured plans. In fact, a substantial percentage of the Massachusetts market is self-insured or self-funded.^{1,2} A

Figure 1. HMO Enrollment: Total Members, 2000 to 2003



¹ Systematic data on this portion of the market is not collected by the state and is not available from other public sources.

² The recent interest in self-funded HMOs is driven primarily by health care costs. Employers view self-funded HMOs as a strategy to reduce costs and better manage company health benefits.

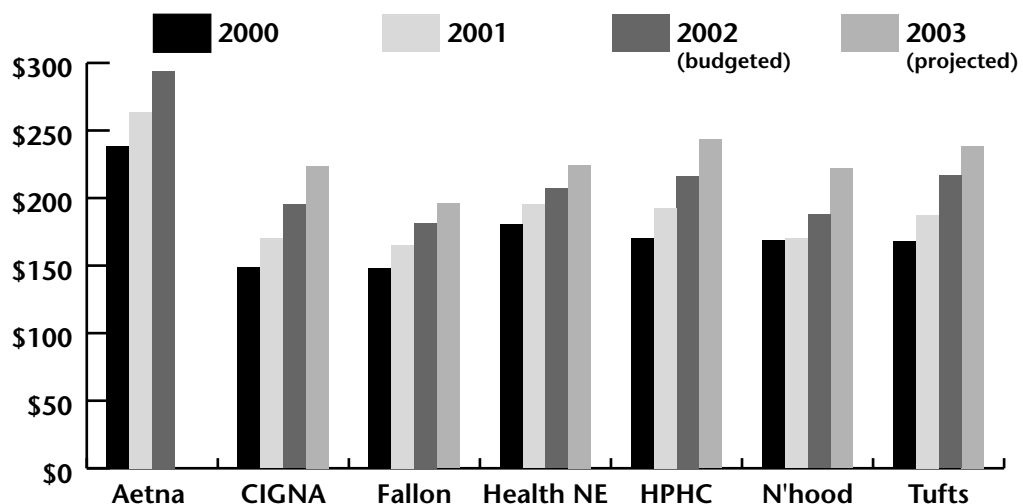
1999 Medical Expenditure Panel Survey, a national survey, revealed that 24.1% of all private sector establishments in Massachusetts maintain at least one self-funded plan. According to the 2001 Employer Health Insurance Survey conducted by the Massachusetts DHCFP, the two most popular reasons why private sector establishments in Massachusetts self-fund include expected savings and ability to offer unregulated benefit packages.

Total, Non-Medical, and Medical Expenses

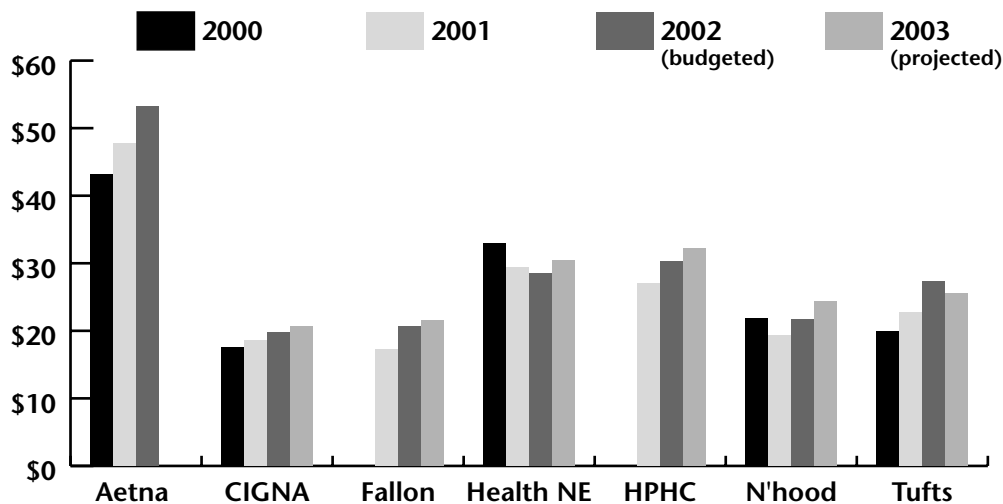
Total Expenses

HMO spending is analyzed by examining medical and non-medical components. The medical expense component is defined as the total cost to the HMO for all medical services provided to members in the defined population. Expenses are usually presented as dollars PMPM. While the medical expense component excludes member copayments, it includes incurred (but not reported) claims estimates, primary care physician management fees and physician incentives, bonuses, and risk sharing adjustments. The non-medical component consists of the HMOs' general administrative expenses plus reinsurance, as well as contributions to reserves and/or returns to shareholders.

**Figure 2. Total Expenses PMPM,
2000 to 2003**



**Figure 3. Total Non-Medical Expenses PMPM,
2000 to 2003**



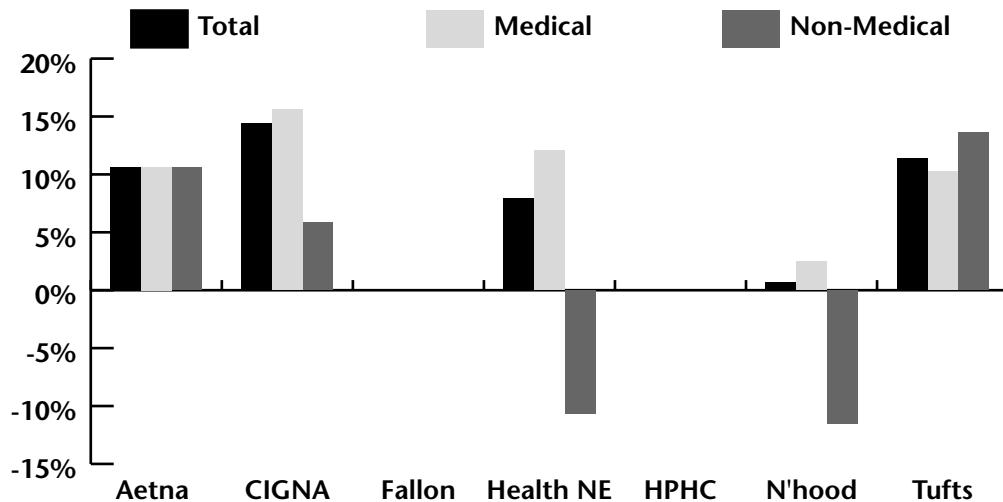
- Plans reported changes in Total Expenses PMPM (see Figure 2 on page 11) between 1% and 14% from 2000 to 2001. The average increase was 10%; the average total expenditure in 2001 was \$192.02.
- Plans reported changes in Total Expenses PMPM (see Figure 2 on page 11) between 15% and 32% from 2001 to 2003. The average increase was 25%; the average projected total expenditures in 2003 are \$224.69.

Total Non-Medical Expenses

The non-medical expense category includes administrative expenses and surplus or, in the case of not-for-profits plans, contributions to reserves. High non-medical expenses could be caused by a number of events such as large expenditures to improve delivery of care (such as an investment in new programs), inefficient administration or high returns to shareholders. In 2000, Fallon and Harvard Pilgrim ran overall deficits that reduced their non-medical expenses by the amount they “borrowed” from their reserves. Therefore, Fallon and Harvard Pilgrim had comparatively large percent increases from 2000 to 2001 (in which both plans operated in the black).

- Aetna, CIGNA, Health NE, and Tufts reported changes in Total Non-Medical Expenses PMPM (Figure 3) between -12% and 14% from 2000 to 2001. The average increase was 2%; the average in 2001 was \$26.00. Fallon’s and HPHC’s losses in 2000 had a larger affect on

Figure 4. HMO Percent Change in Medical, Non-Medical and Total Expenses PMPM, 2000 to 2001



non-medical expenses than on total expenses. Therefore, Fallon's and HPHC's non-medical expenses are removed from the plans' percent change from 2000 to 2001.

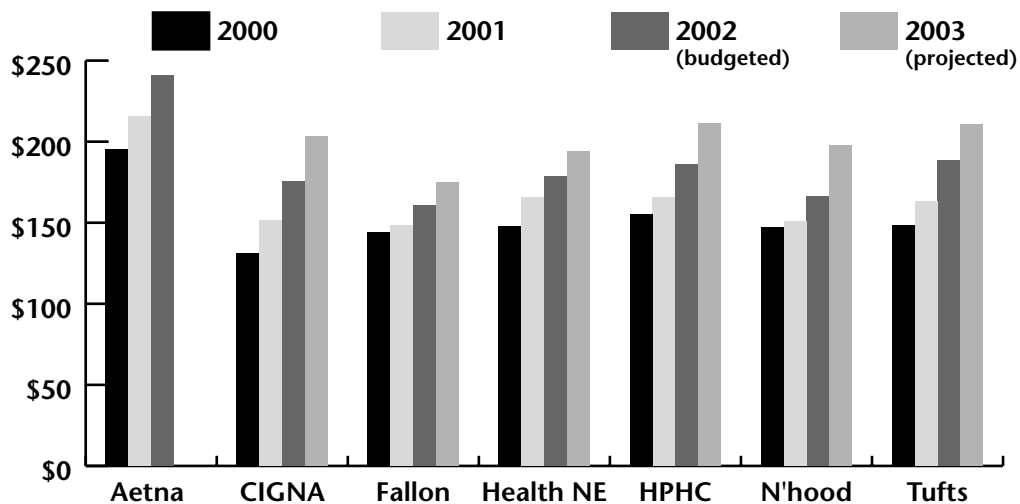
- The plans, including Fallon and HPHC, reported changes in Total Non-Medical Expenses PMPM (see Figure 3 on page 12) between 4% and 26% from 2001 to 2003. The average increase was 16%; the projected average in 2003 is \$25.80.

Figure 4 shows the percent change for total, medical and non-medical expenses between 2000 and 2001. Medical expenses increased at a higher rate than non-medical expenses for most plans. Non-medical expenses actually decreased for two plans. Expenses for Fallon and Harvard Pilgrim are not included in Figure 4 because their losses in 2000 skew their experience and the averages of the plans as a whole.

Categories of medical expenses include inpatient and outpatient hospital costs, pharmacy costs, and physician services. A high medical component percentage could point to efficient management or conversely, a plan operating close to or without sufficient funds to cover administrative expenses.

[Note: Look at plans' medical and non-medical expenses over time to learn how efficient the plans are.]

**Figure 5. Total Medical Expenses PMPM,
2000 to 2003**



- Plans reported changes in Total Medical Expenses PMPM (Figure 5) between 2% and 16% from 2000 to 2001. The average increase was 9%; the average in 2001 was \$165.85.
- Plans reported changes in Total Medical Expenses PMPM (Figure 5) between 17% and 34% from 2001 to 2003. The average increase was 26%; the projected average in 2003 is \$198.49.
- Aetna did not itemize 2001 medical expenses, therefore, these figures have been excluded (Figure 5).

Figure 6. Distribution of Massachusetts HMOs' Average Medical Spending PMPM, 2001

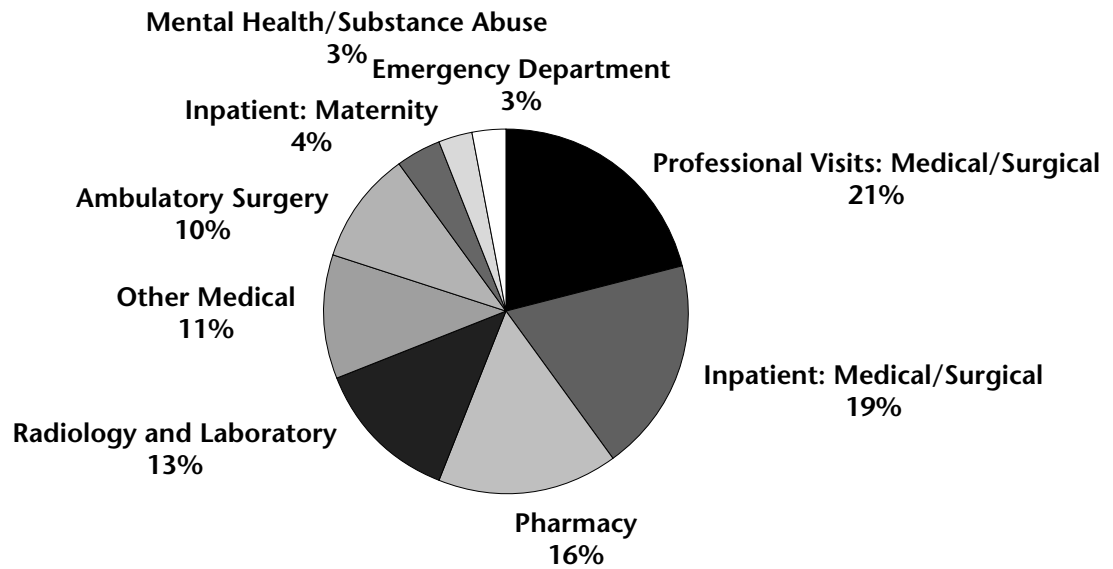


Table 2: HMO Medical Spending in 2001

| Service Category | Average Expenses PMPM |
|---------------------------------------|-----------------------|
| Emergency Department | \$4.55 |
| Mental Health/Substance Abuse | \$5.36 |
| Inpatient: Maternity | \$5.60 |
| Ambulatory Surgery | \$15.99 |
| Radiology and Laboratory | \$19.71 |
| Inpatient: Medical/Surgical | \$30.06 |
| Pharmacy | \$25.19 |
| Other Medical | \$17.80 |
| Professional Visits: Medical/Surgical | \$33.10 |
| Total | \$157.34 |

Inpatient Care

Acute Care

Inpatient Hospital

Inpatient expenses are defined as all acute and non-acute hospital inpatient expenses, excluding professional expenses. A high percentage of spending on inpatient services may indicate an older or sicker population, poor medical management, or higher-than-average costs per inpatient day. Among the reasons for low inpatient expenses are effective medical management, shifting the site of care to outpatient providers, a healthier population, aggressive discounts negotiated by health plans and a larger proportion of utilization in less expensive, community hospitals.

Figure 7. Total Inpatient Hospital Expenses PMPM, 2000 to 2003

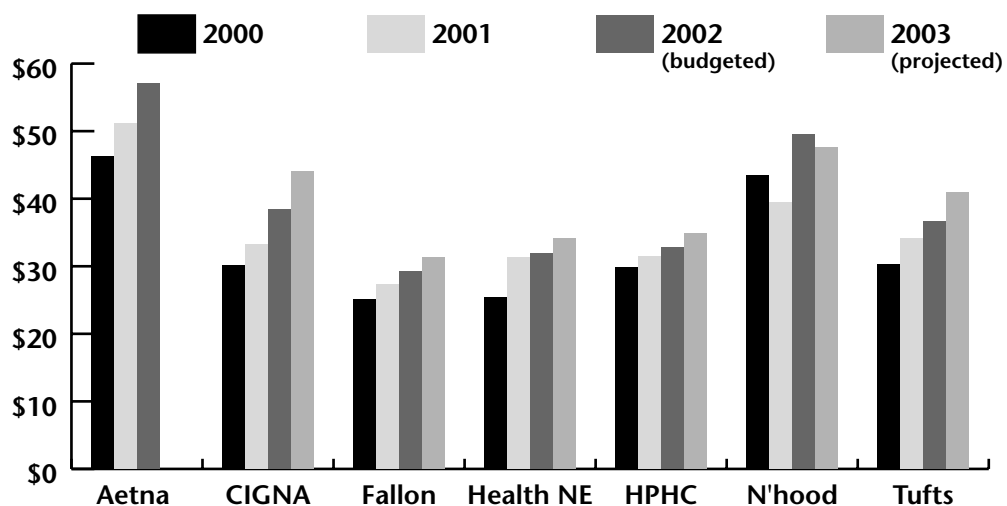
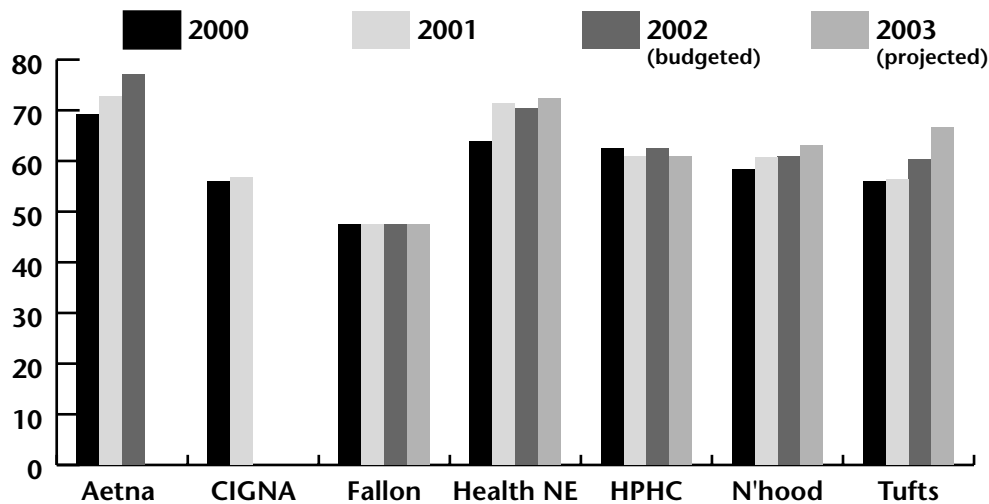
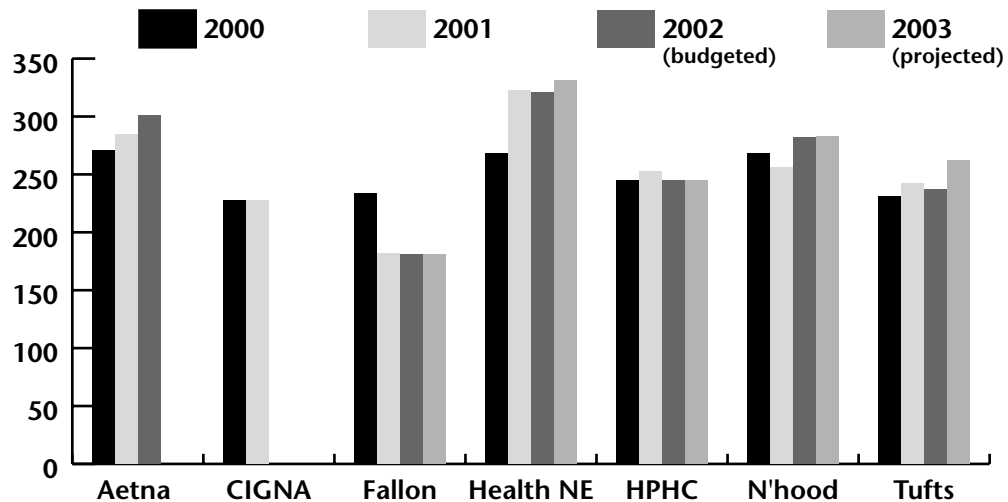


Figure 8. Total Acute Admissions per 1,000 Members, 2000 to 2003



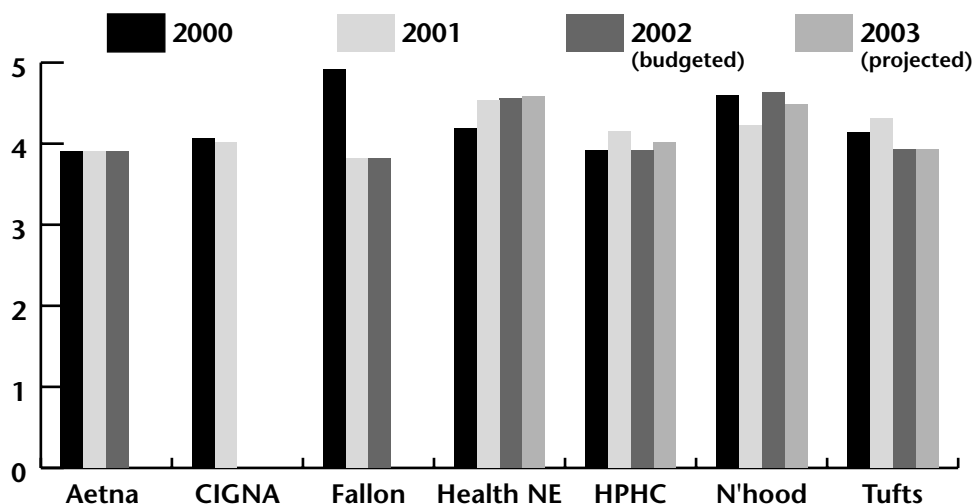
- Plans reported changes in Total Inpatient Hospital Expenses PMPM (see Figure 7 on page 17) between -9% and 23% from 2000 to 2001. The average increase was 9%; the average in 2001 was \$35.43.
 - Plans reported changes in Total Inpatient Hospital Expenses PMPM (see Figure 7 on page 17) between 9% and 33% from 2001 to 2003. The average increase was 18%; the projected average in 2003 is \$38.82.
 - Tufts' inpatient hospital expenses include mental health/substance abuse (MH/SA) intermediate care and residential treatment (see Figure 7 on page 17).
-
- Plans reported changes in Total Acute Admissions per 1,000 Members (Figure 8) between -2% and 11% from 2000 to 2001. The average increase was 3%; the average in 2001 was 60.89.
 - Plans reported changes in Total Acute Admissions per 1,000 Members (Figure 8) between 0% and 18% from 2001 to 2003. The average increase was 5%; the projected average in 2003 is 62.07.

Figure 9. Total Inpatient Acute Days per 1,000 Members, 2000 to 2003



- Plans reported changes in Total Inpatient Acute Days per 1,000 Members (Figure 9) between -22% and 20% from 2000 to 2001. The average increase was 1%; the average in 2001 was 252.66.
- Plans reported changes in Total Inpatient Acute Days per 1,000 Members (Figure 9) between -3% and 10% from 2001 to 2003. The average increase was 3%; the projected average in 2003 is 260.37.

**Figure 10. Acute Care ALOS,
2000 to 2003**



In recent years, many institutions have seen decreasing ALOS plateau. More recently, some hospitals are witnessing ALOS numbers rising incrementally. While this data cannot speak to whether this trend holds for all Massachusetts HMOs, the majority of plans in this survey anticipate continued increases in acute inpatient ALOS. This trend supports the current industry speculation that managed care's influence over health care spending is decreasing.

- Plans reported changes in Acute Care: ALOS (Figure 10) between -22% and 8% from 2000 to 2001. The average increase was -2%; the average in 2001 was 4.14.
- Plans reported changes in Acute Care: ALOS (Figure 10) between -9% and 6% from 2001 to 2003. The average increase was -1%; the projected average in 2003 is 4.25.
- Tufts' inpatient hospital expenses include MH/SA intermediate care and residential treatment (Figure 10).

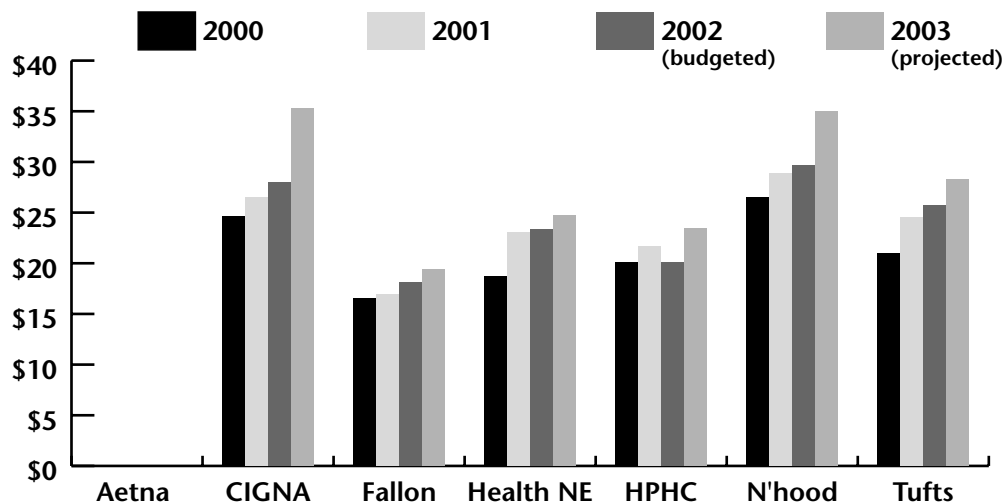
Table 3: Comparison of Percent Change between Inpatient Cost and Utilization, 2000-2001

| HMO | Inpatient Hospital Total Costs PMPM | | | Inpatient Acute Care Days per 1,000 Members | | |
|-----------------|--|---------|-------------------|--|--------|-------------------|
| | 2000 | 2001 | Percent Change | 2000 | 2001 | Percent Change |
| Aetna | \$46.22 | \$51.13 | 11% | 270.26 | 284.59 | 5% |
| CIGNA | \$30.16 | \$33.22 | 10% | 227.39 | 227.78 | 0% |
| Fallon | \$25.04 | \$27.32 | 9% | 233.52 | 181.63 | -22% |
| Health NE | \$25.40 | \$31.32 | 23% | 267.94 | 322.80 | 20% |
| HPHC | \$29.76 | \$31.4 | 6% | 244.72 | 252.80 | 3% |
| Neighborhood HP | \$43.38 | \$39.43 | -9% | 268.50 | 256.40 | -5% |
| Tufts | \$30.22 | \$34.16 | 13% | 231.29 | 242.64 | 5% |

Table 3 compares inpatient hospital expenses and inpatient days per 1,000 members for 2000 and 2001, and percent change.

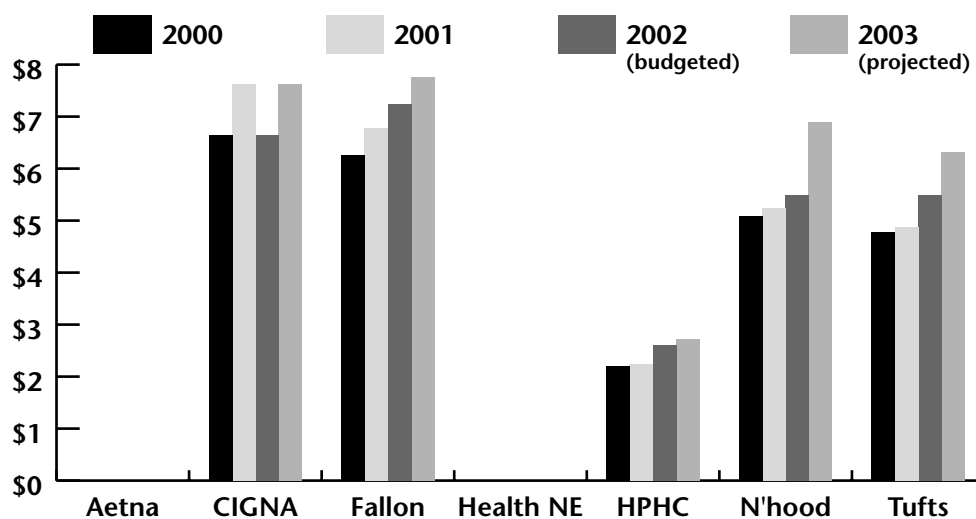
[Note: The percent change in expenses does not always correspond with the percent change in days per 1,000. Hospital costs are not the only costs incurred for inpatients. A portion of Expenses for Physicians is another inpatient expense.]

Figure 11. Inpatient Hospital Medical/Surgical Expenses PMPM, 2000 to 2003



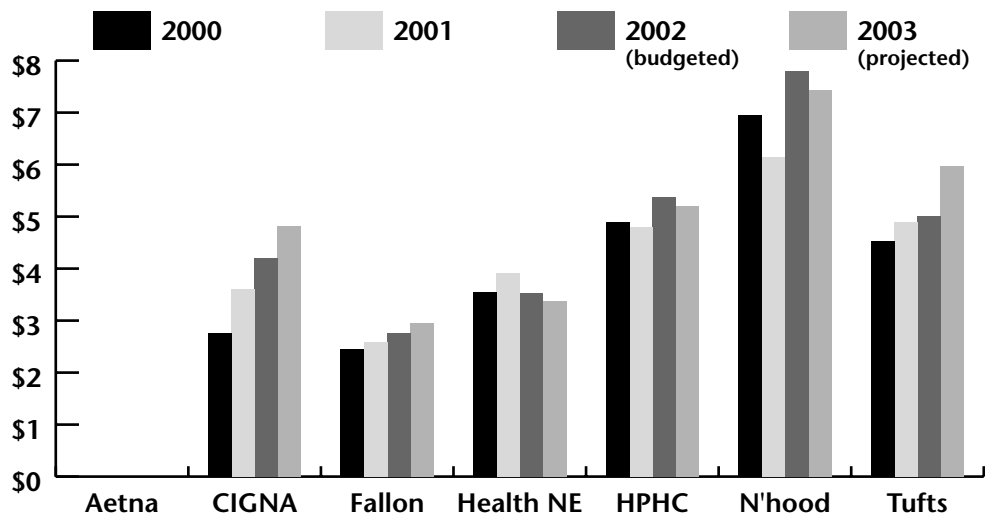
- Plans reported changes in Inpatient Hospital Medical/Surgical Expenses PMPM (Figure 11) between 3% and 23% from 2000 to 2001. The average increase was 11%; the average in 2001 was \$23.58.
- Plans reported changes in Inpatient Hospital Medical/Surgical Expenses PMPM (Figure 11) between 7% and 33% from 2001 to 2003. The average increase was 17%; the projected average in 2003 is \$27.69.
- Tufts' medical/surgical expenses include rehabilitation care and sick newborn care (Figure 11).

Figure 12. Physician Services: Inpatient Surgery Expenses PMPM, 2000 to 2003



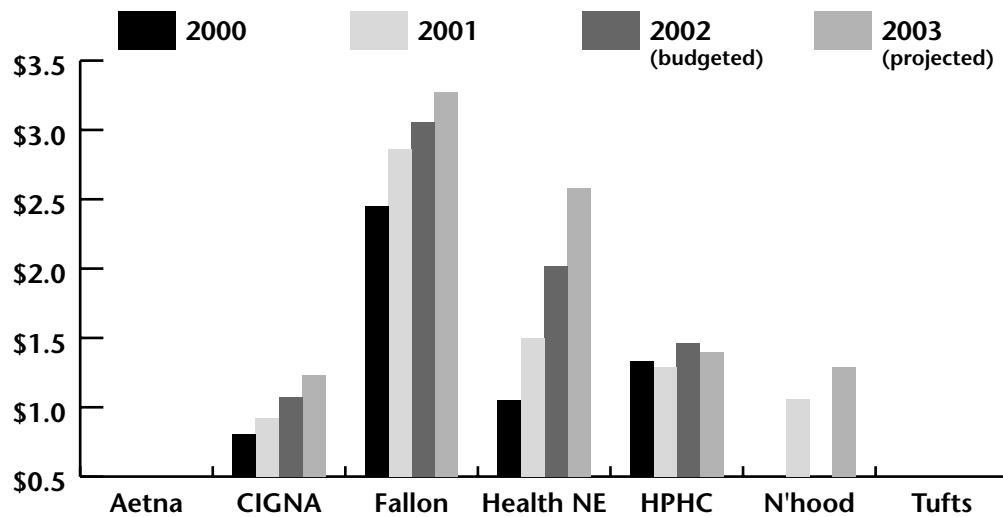
- Plans reported changes in Physician Services: Inpatient Surgery Expenses PMPM (Figure 12) between 2% and 15% from 2000 to 2001. The average increase was 6%; the average in 2001 was \$5.36.
- Plans reported changes in Physician Services: Inpatient Surgery Expenses PMPM (Figure 12) between 0% and 31% from 2001 to 2003. The average increase was 19%; the projected average in 2003 is \$6.26.

Figure 13. Inpatient Maternity Wellborn Expenses PMPM, 2000 to 2003



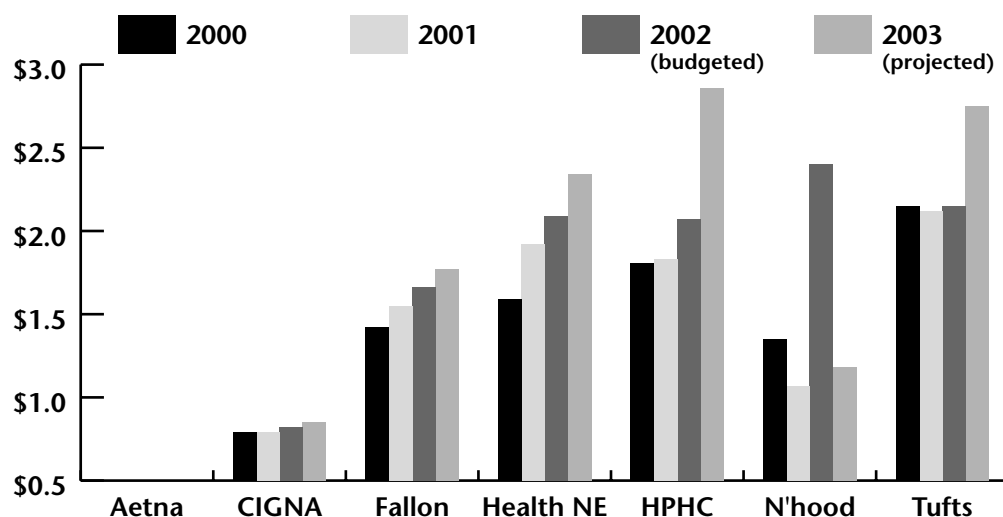
- Plans reported changes in Inpatient Maternity Wellborn Expenses PMPM (Figure 13) between -12% and 31% from 2000 to 2001. The average increase was 7%; the average in 2001 was \$4.33.
- Plans reported changes in Inpatient Maternity Wellborn Expenses PMPM (Figure 13) between -14% and 33% from 2001 to 2003. The average increase was 14%; the projected average in 2003 is \$4.96.

Figure 14. Inpatient Maternity Sick Newborn Expenses PMPM, 2000 to 2003



- Plans reported changes in Inpatient Maternity Sick Newborn Expenses PMPM (Figure 14) between -3% and 43% from 2000 to 2001. The average increase was 18%; the average in 2001 was \$1.53.
- Plans reported changes in Inpatient Maternity Sick Newborn Expenses PMPM (Figure 14) between 9% and 72% from 2001 to 2003. The average increase was 30%; the projected average in 2003 is \$1.95.
- Tufts reports sick newborn expenses in medical/surgical costs. NHP had an unusually high number of sick newborns in 2001, which, because of their relatively small commercial population, skewed their results. Therefore, NHP's numbers are removed from the plans' averages and ranges (Figure 14).

Figure 15. Inpatient Mental Health/Substance Abuse Expenses PMPM, 2000 to 2003



Mental Health/Substance Abuse

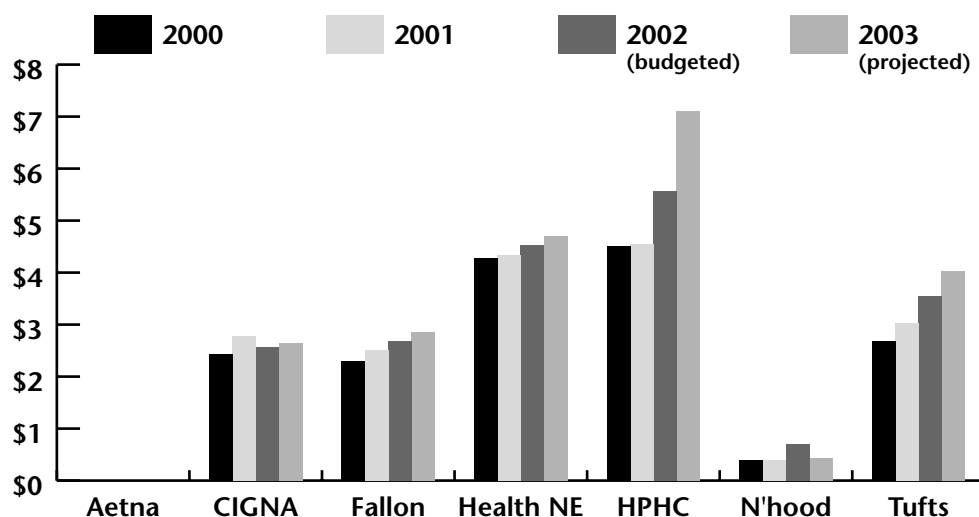
MH/SA problems are at risk of being under-diagnosed; higher rates of care may indicate that more patients with mental health disorders have been appropriately identified and treated. It is preferable to treat people in the least intensive setting that is appropriate. High quality outpatient and intermediate care can reduce the need for inpatient care. Therefore, a high ratio of outpatient and intermediate visits to inpatient admissions can indicate that a MH/SA system is doing its job well. Equally, if not more, important is that overly restrictive admission criteria could be the cause of low admission rates. If admission criteria are too strict, people who need to be admitted—those who may pose a threat to him or herself or someone else—are being excluded.

[Note: Question plans about their admission criteria if their outpatient utilization and admission rates are both low.]

[Note: Ask about the financial arrangements between an HMO and its MH/SA clinicians. Do payments to MH/SA clinicians take quality-of-care into account? If so, how, and to what extent? Do the reimbursement arrangements create incentives to reduce utilization that could result in impaired quality?]

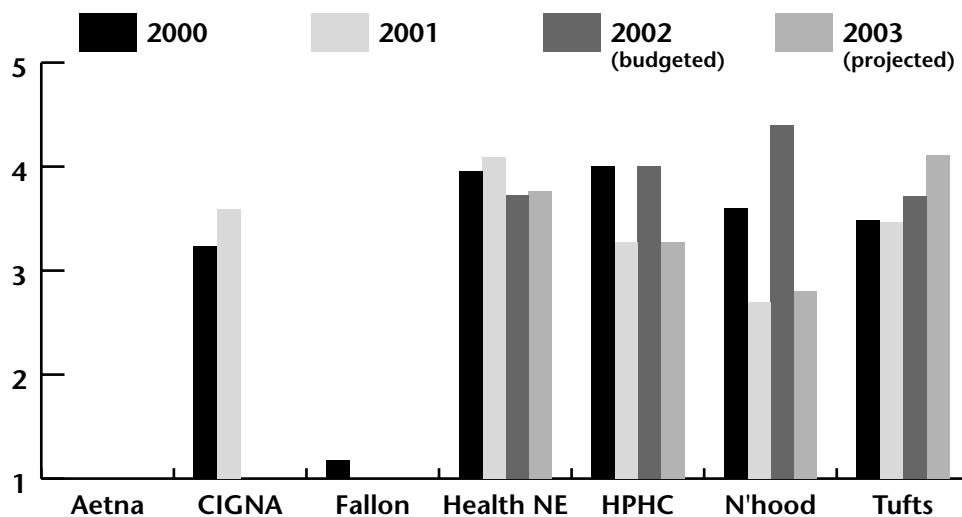
- Plans reported changes in total Inpatient Mental Health/Substance Abuse Expenses PMPM (Figure 15) between -21% and 21% from 2000 to 2001. The average increase was 1%; the average in 2001 was \$1.55.

Figure 16. Physician Services: Mental Health/Substance Abuse Expenses PMPM, 2000 to 2003



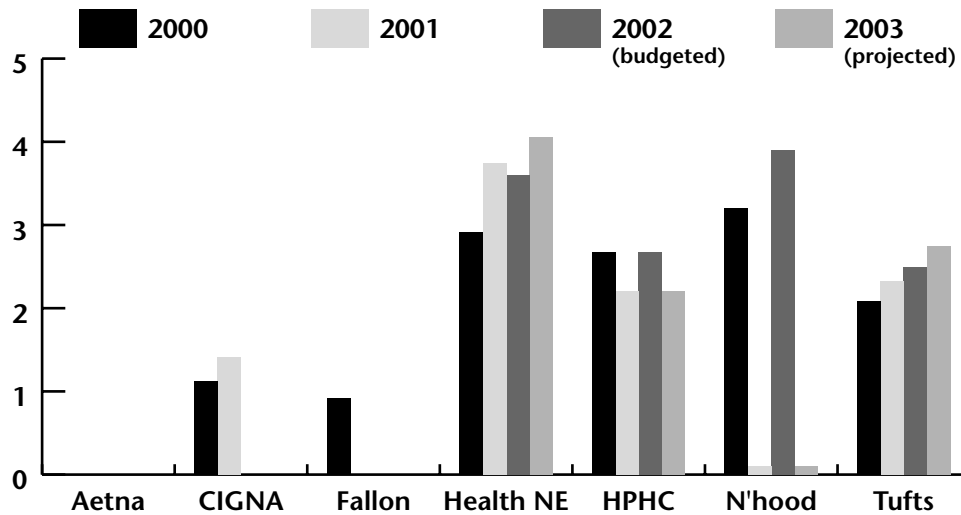
- Plans reported changes in total Inpatient Mental Health/Substance Abuse Expenses PMPM (see Figure 15 on page 26) between 8% and 56% from 2001 to 2003. The average increase was 23%; the projected average in 2003 is \$1.96.
 - Tufts' inpatient expenses include the costs of intermediate care and residential treatment (see Figure 15 on page 26).
-
- Plans reported changes in Physician Services: Mental Health/Substance Abuse Expenses PMPM (Figure 16) between 0% and 14% from 2000 to 2001. The average increase was 6%; the average in 2001 was \$2.93.
 - Plans reported changes in Physician Services: Mental Health/Substance Abuse Expenses PMPM (Figure 16) between -4% and 56% from 2001 to 2003. The average increase was 20%; the projected average in 2003 is \$3.63.

Figure 17. Mental Health Admissions per 1,000 Members, 2000 to 2003



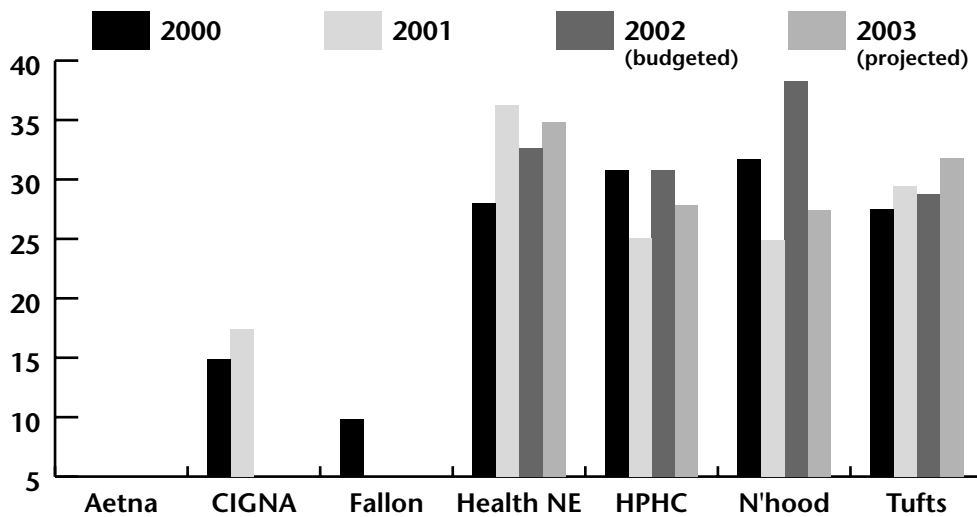
- Plans reported changes in Mental Health Admissions per 1,000 Members (Figure 17) between -25% and 11% from 2000 to 2001. The average increase was -6%; the average in 2001 was 3.42.
- Plans reported changes in Mental Health Admissions per 1,000 Members (Figure 17) between -8% and 18% from 2001 to 2003. The average increase was 4%; the projected average in 2003 is 3.49.
- Fallon's data for 2001 through 2003 is based upon incomplete information and, therefore, Fallon's admissions per 1,000 members are not included in the plans' averages and ranges. Tufts includes intermediate care mental health in mental health admissions. Tufts' figures are included in the plan averages and ranges (Figure 17).

Figure 18. Substance Abuse Admissions per 1,000 Members, 2000 to 2003



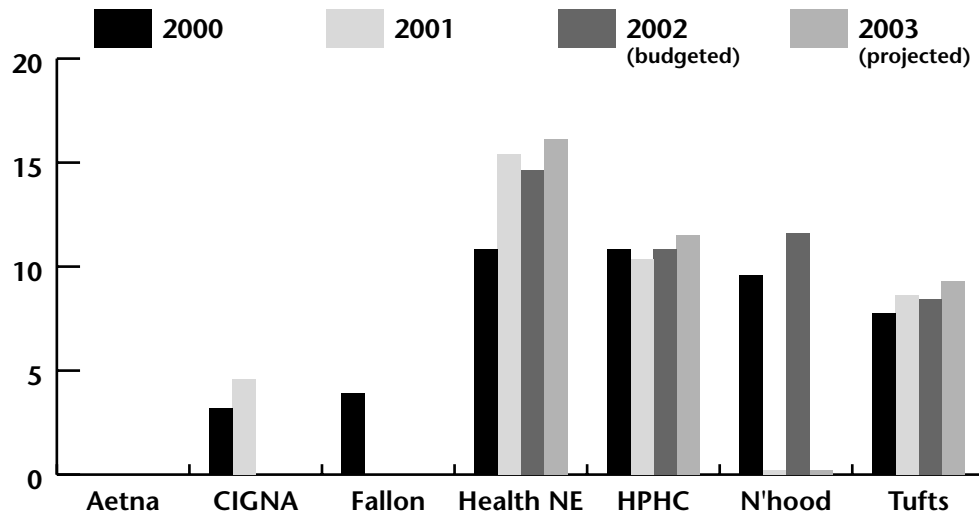
- Plans reported changes in Substance Abuse Admissions Per 1,000 Members (Figure 18) between -97% and 29% from 2000 to 2001 for an average decrease of 10%; the average in 2001 was 1.96.
- Plans reported changes in Substance Abuse Admissions Per 1,000 Members (Figure 18) between 0% and 18% from 2001 to 2003. The average increase was 7%; the projected average in 2003 is 2.28.
- Fallon's data for 2001 through 2003 is based upon incomplete information and therefore Fallon's admissions per 1,000 members are not included in the plans' averages and ranges. Tufts includes intermediate care substance abuse in substance abuse admissions; Tufts' figures are included in the plan averages and ranges (Figure 18).

Figure 19. Mental Health Inpatient Acute Days per 1,000 Members, 2000 to 2003



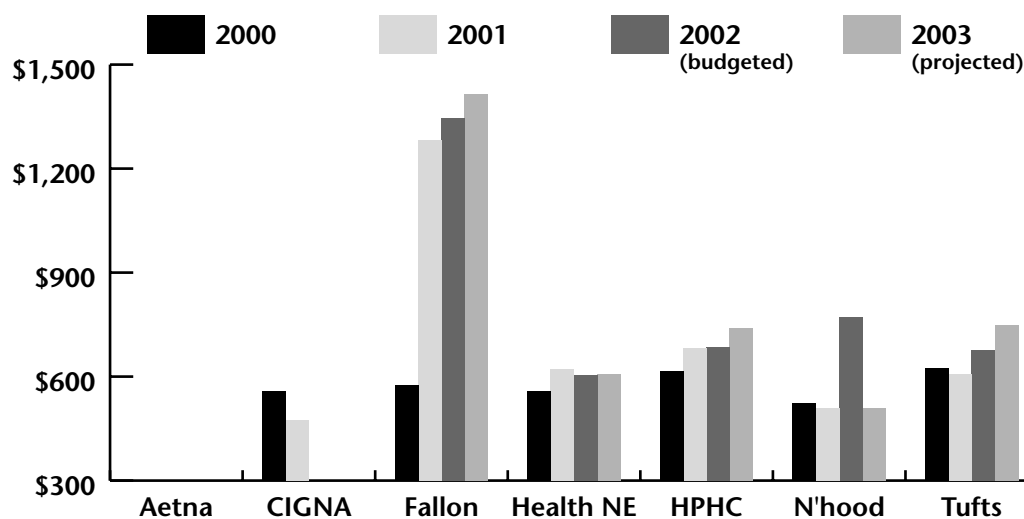
- Plans reported changes in Mental Health Inpatient Acute Days per 1,000 Members (Figure 19) between -21% and 30% from 2000 to 2001. The average increase was 3%; the average in 2001 was 27.
- Plans reported changes in Mental Health Inpatient Acute Days per 1,000 Members (Figure 19) between -4% and 11% in total expenses from 2001 to 2003. The average increase was 6%; the projected average in 2003 is 30.
- Fallon's data for 2001 through 2003 is based upon incomplete information and, therefore, Fallon's admissions per 1,000 members are not included in the plans' averages and ranges. Tufts includes intermediate care mental health care in mental health admissions; Tufts' figures are included in the plan averages and ranges (Figure 19).

Figure 20. Substance Abuse Inpatient Acute Days per 1,000 Members, 2000 to 2003



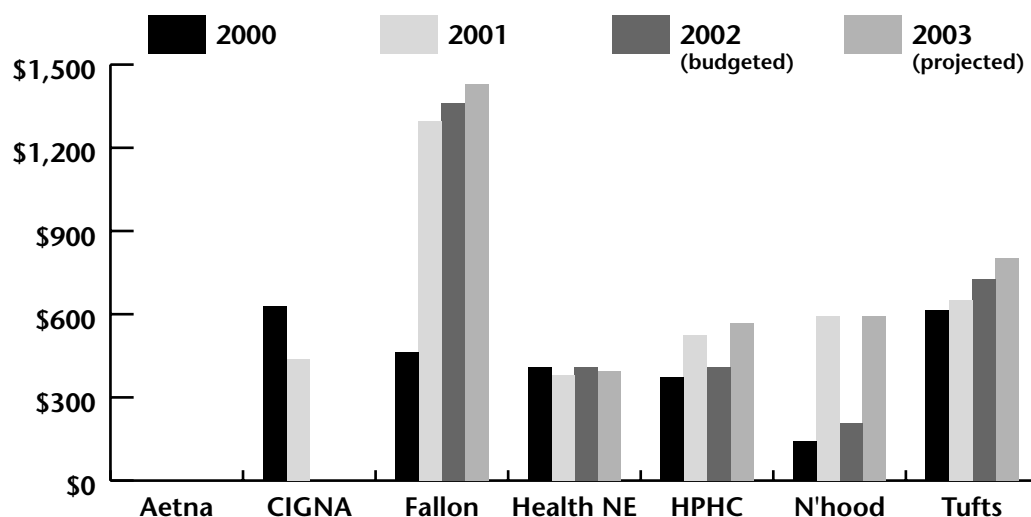
- Plans reported changes in Substance Abuse Inpatient Acute Days per 1,000 Members (Figure 20) between -98% and 44% from 2000 to 2001 for an average decrease of 1%; the average in 2001 was 7.84.
- Plans reported changes in Substance Abuse Inpatient Acute Days per 1,000 Members (Figure 20) between 0% and 11% from 2001 to 2003. The average increase was 6%; the projected average in 2003 is 9.30.
- Fallon's data for 2001 through 2003 is based upon incomplete information and, therefore, Fallon's admissions per 1,000 members are not included in the plans' averages and ranges. Tufts includes intermediate care substance abuse in substance abuse admissions; Tufts' figures are included in the plan averages and ranges (Figure 20).

Figure 21. Mental Health Inpatient Facility Costs per Day (excluding MD costs), 2000 to 2003



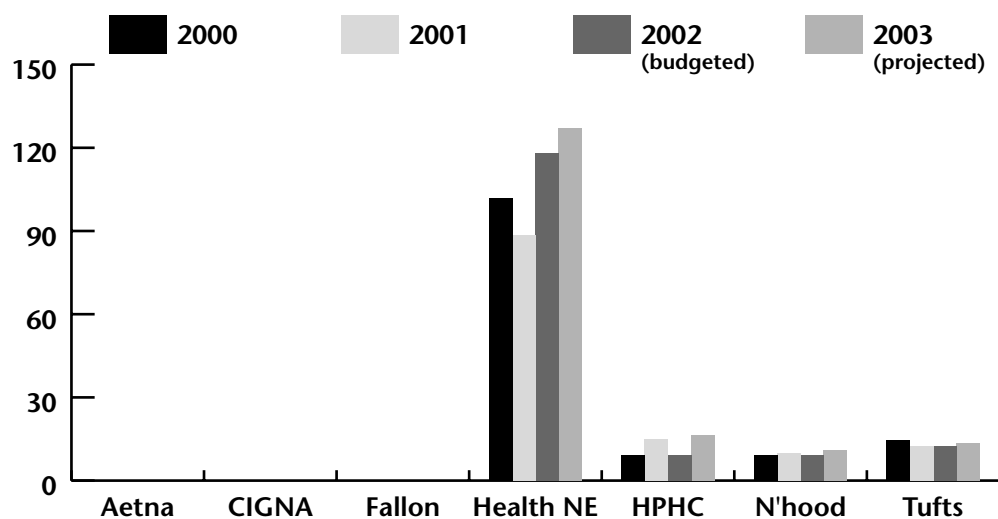
- Plans reported changes in Mental Health Inpatient Facility Costs per Day (Figure 21) between -15% and 123% from 2000 to 2001. The average increase was 21%; the average in 2001 was \$696.33.
- Plans reported changes in Mental Health Inpatient Facility Costs per Day (Figure 21) between -2% and 23% from 2001 to 2003. The average increase was 8%; the projected average in 2003 is \$803.33.
- Tufts includes intermediate care mental health in mental health admissions; Tufts' figures are included in the plan averages and ranges (Figure 21).

Figure 22. Substance Abuse Inpatient Facility Costs per Day (excluding MD costs), 2000 to 2003



- Plans reported changes in Substance Abuse Inpatient Facility Costs per Day (Figure 22) between -31% and 315% from 2000 to 2001. The average increase was 84%; the average in 2001 was \$647.11.
- Plans reported changes in Substance Abuse Inpatient Facility Costs per Day (Figure 22) between 0% and 23% from 2001 to 2003. The average increase was 9%; the projected average in 2003 is \$757.42.
- Tufts includes intermediate care substance abuse in substance abuse admissions; Tufts' figures are included in the plan averages and ranges (Figure 22).

Figure 23. Mental Health/Substance Abuse Intermediate Care Visits per 1,000 Members, 2000 to 2003



Intermediate Care

Intermediate care is a service that can bridge the gap between inpatient and outpatient care. Substantial utilization of intermediate care may indicate that a MH/SA program makes full and appropriate use of the whole spectrum of MH/SA services.

- Plans reported changes in Mental Health/Substance Abuse Intermediate Care Visits per 1,000 Members (Figure 23) between -13% and 61% from 2000 to 2001. The average increase was 11%; the average in 2001 was 31.
- Plans reported changes in Mental Health/Substance Abuse Intermediate Care Visits per 1,000 Members (Figure 23) between 8% and 44% from 2001 to 2003. The average increase was 18%; the projected average in 2003 is 42.

Outpatient Care

Acute

Outpatient hospital expenses include facility, but not physician, expenses. Outpatient expenses are broken out for several categories of care. This report includes information on total outpatient care, outpatient surgery, and Emergency Department (ED) services.

- Plans reported changes in Total Outpatient Hospital Expenses PMPM (Figure 24) between -4% and 36% from 2000 to 2001. The average increase was 17%; the average in 2001 was \$26.82.

Figure 24. Total Outpatient Hospital Expenses PMPM, 2000 to 2003

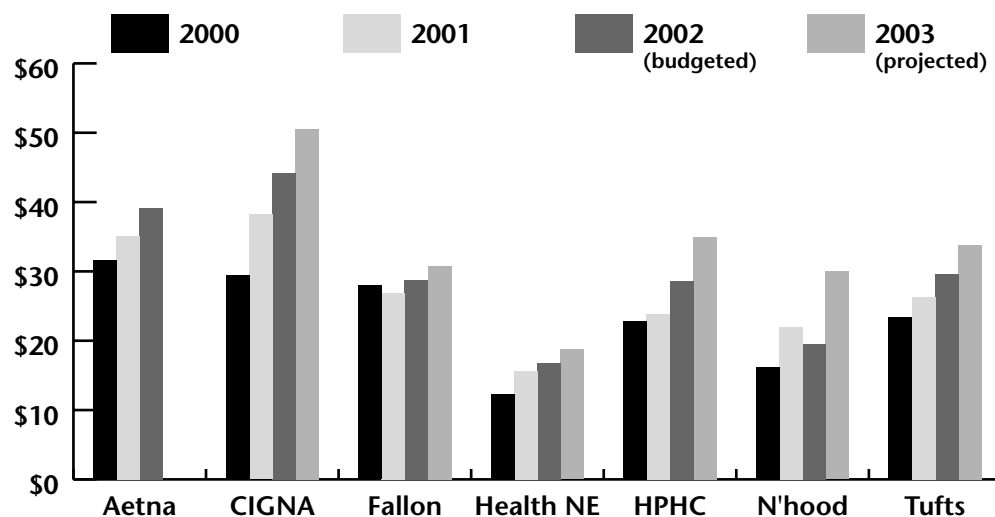
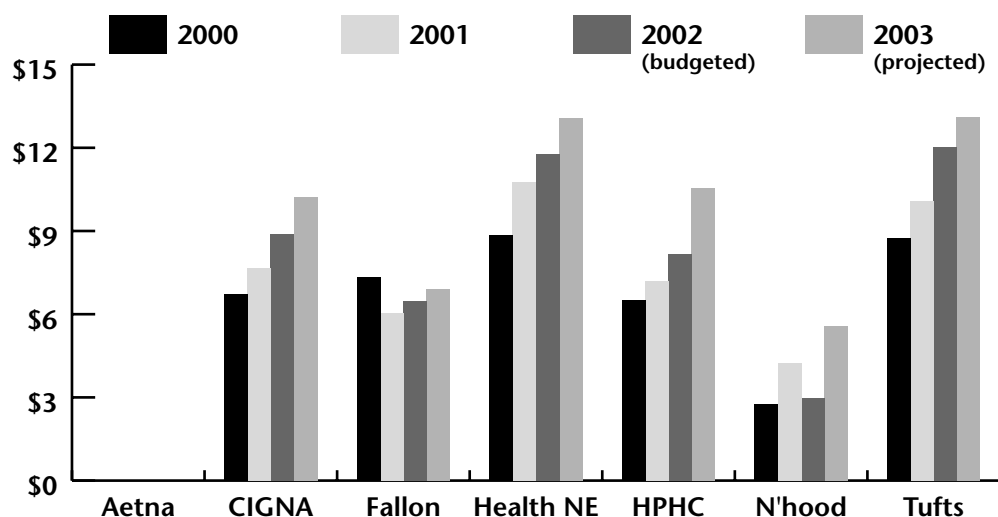


Figure 25. Outpatient Hospital Surgical Expenses PMPM, 2000 to 2003



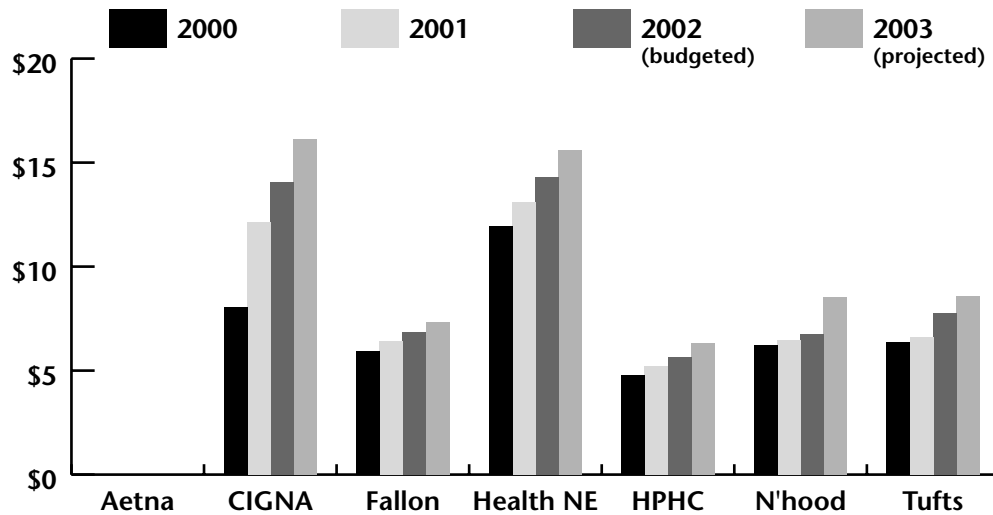
- Plans reported changes in Total Outpatient Hospital Expenses PMPM (see Figure 24 on page 35) between 14% and 47% from 2001 to 2003. The average increase was 30%; the projected average in 2003 is \$33.13.

Outpatient Surgery

Outpatient hospital surgical expenses are expected to increase substantially from 2000 to 2003 except for one plan.

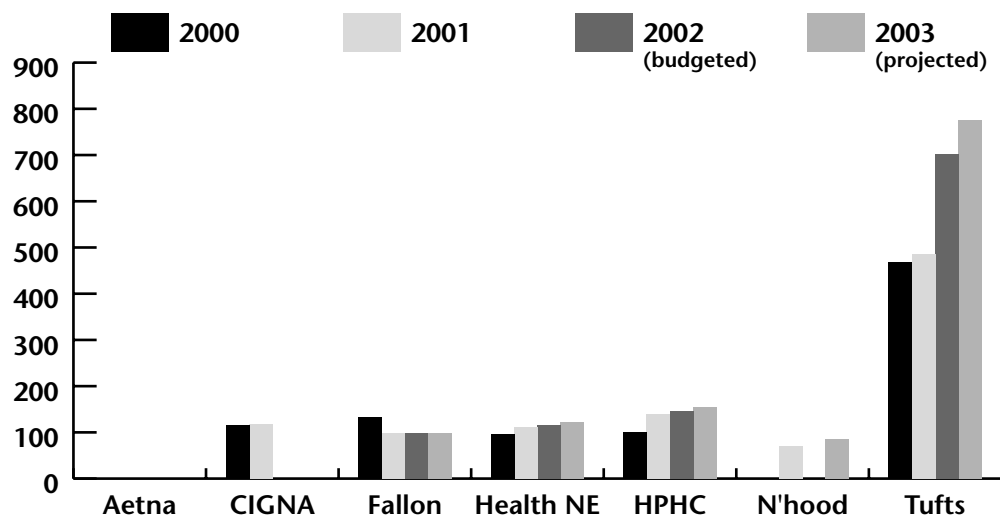
- Plans reported changes in Outpatient Hospital Surgical Expenses PMPM (Figure 25) between -18% and 54% from 2000 to 2001. The average increase was 16%; the average in 2001 was \$7.66.
- Plans reported changes in Outpatient Hospital Surgical Expenses PMPM (Figure 25) between 15% and 47% from 2001 to 2003. The average increase was 30%; the projected average in 2003 is \$9.90.

Figure 26. Physician Services: Outpatient Surgery Expenses PMPM, 2000 to 2003



- Plans reported changes in Physician Services: Outpatient Surgery Expenses PMPM (Figure 26) between 4% and 50% from 2000 to 2001. The average increase was 14%; the average in 2001 was \$8.33.
- Plans reported changes in Physician Services: Outpatient Surgery Expenses PMPM (Figure 26) between 15% and 33% from 2001 to 2003. The average increase was 25%; the projected average in 2003 is \$10.42.

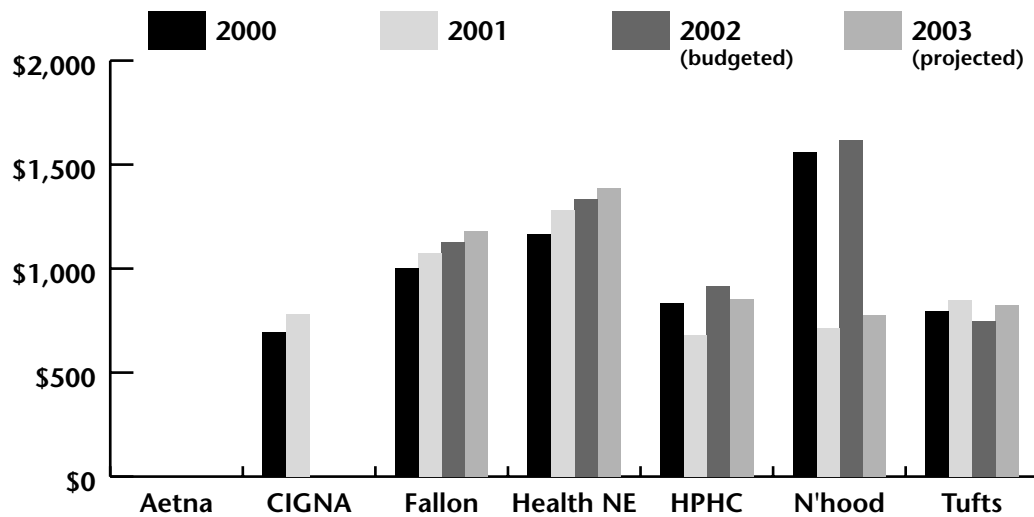
Figure 27. Outpatient Surgery Visits per 1,000 Members, 2000 to 2003



For most plans, the increase in ambulatory surgery is not keeping pace with the increase in hospital or physician expenses.

- Plans reported changes in Outpatient Surgery Visits Per 1,000 Members (Figure 27) between -26% and 37% from 2000 to 2001. The average increase was 7%; the average in 2001 was 107.40.
- Plans reported changes in Outpatient Surgery Visits Per 1,000 Members (Figure 27) between 0% and 21% from 2001 to 2003. The average increase was 10%; the projected average in 2003 is 115.09.
- NHP revised the methodology by which it counted outpatient surgery visits for 2000 and 2002. Therefore, comparisons between years are not valid and NHP's numbers are removed from the plans' averages and ranges. Tufts reported outpatient surgery units, rather than visits, per 1,000 members; therefore its numbers are removed from the other plans' averages and ranges (Figure 27).

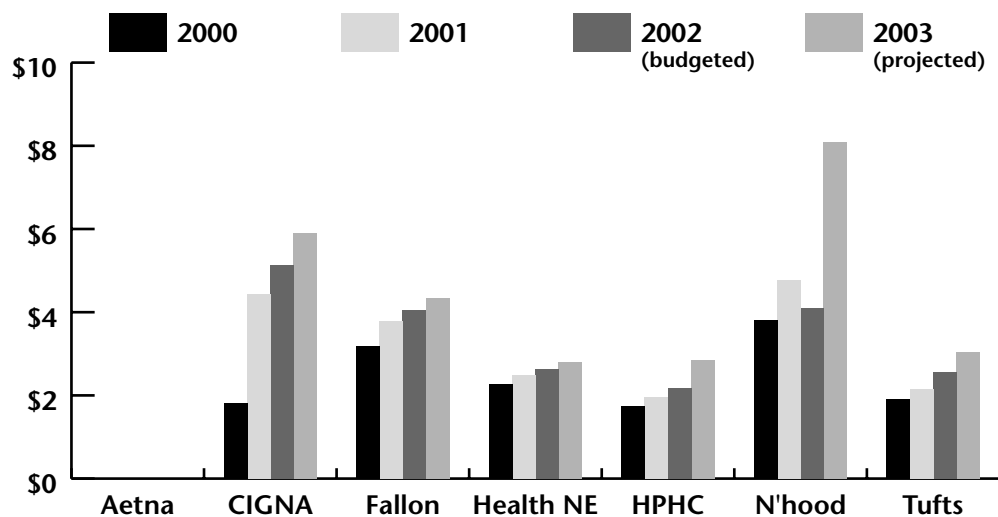
Figure 28. Surgical Ambulatory Visit Facility Costs per Encounter (excludes MD costs), 2000 to 2003



Trends in outpatient surgical hospital and physician expenses, and facility costs are not always proportionate with utilization trends.

- Plans reported changes in Surgical Ambulatory Visit Facility Costs per Encounter (Figure 28) between -18% and 12% from 2000 to 2001. The average increase was 3%; the average in 2001 was \$954.26.
- Plans reported changes in Surgical Ambulatory Visit Facility Costs per Encounter (Figure 28) between 8% and 25% from 2001 to 2003. The average increase was 14%; the projected average in 2003 is \$1,140.13.

Figure 29. Outpatient Hospital Emergency Services PMPM, 2000 to 2003

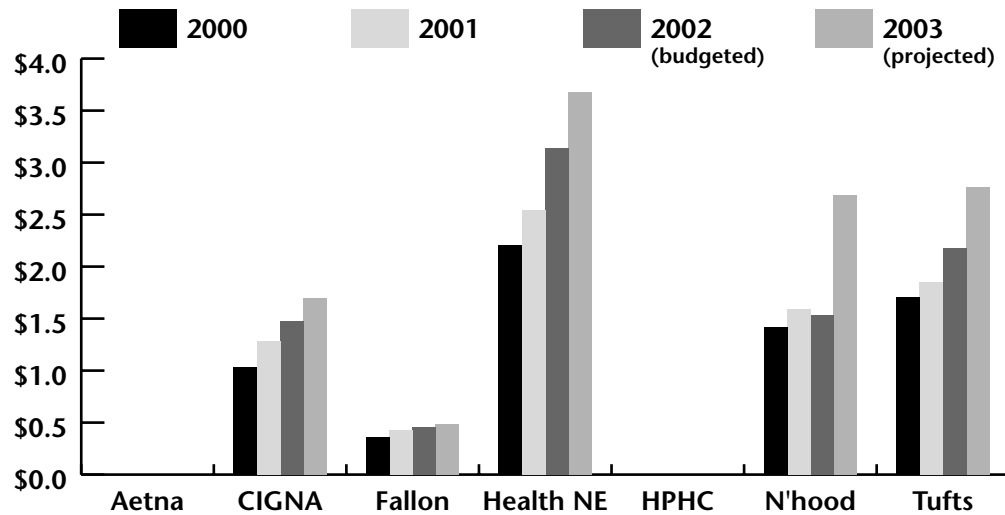


Outpatient ED

“Non-urgent ED visits” is an area that has been targeted to reduce wasted health care dollars.

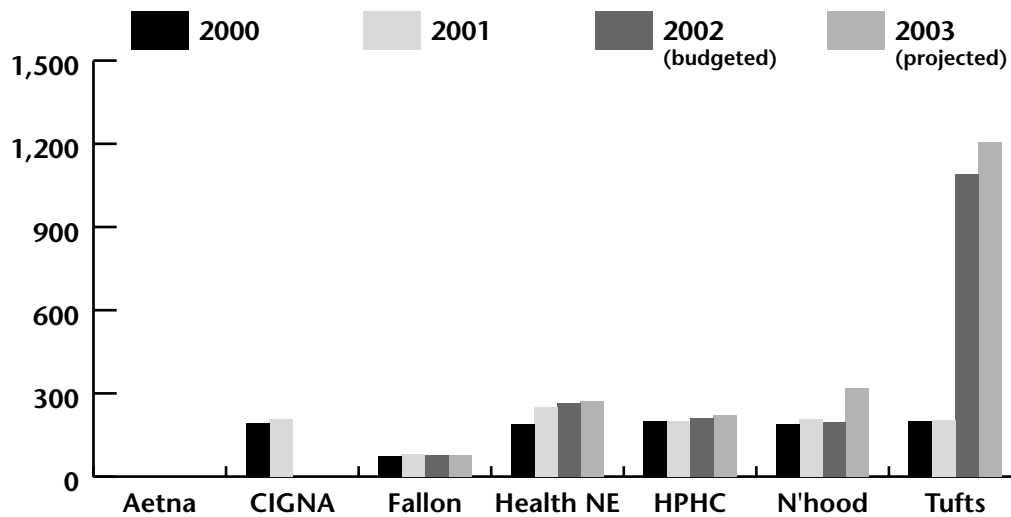
- Plans reported changes in Outpatient Hospital Emergency Services PMPM (Figure 29) between 9% and 145% from 2000 to 2001. The average increase was 37%; the average in 2001 was \$3.26.
- Plans reported changes in Outpatient Hospital Emergency Services PMPM (Figure 29) between 13% and 69% from 2001 to 2003. The average increase was 36%; the projected average in 2003 is \$4.50.

Figure 30. Physician Services: Emergency Room Expenses PMPM, 2000 to 2003



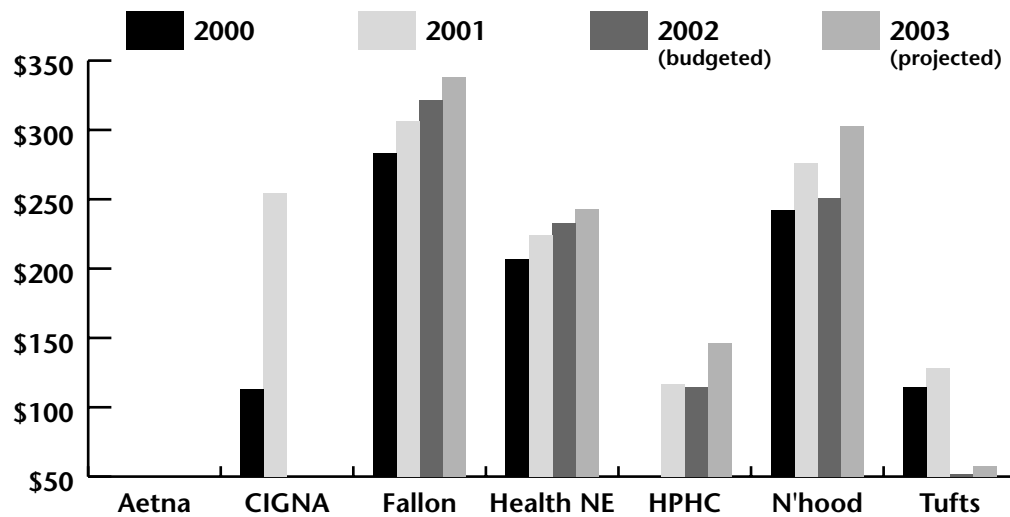
- Plans reported changes in Physician Services: Emergency Room Expenses PMPM (Figure 30) between 8% and 24% from 2000 to 2001. The average increase was 16%; the average in 2001 was \$1.54.
- Plans reported changes in Physician Services: Emergency Room Expenses PMPM (Figure 30) between 14% and 69% from 2001 to 2003. The average increase was 42%; the projected average in 2003 is \$2.26.

Figure 31. Emergency Services: Visits per 1,000 Members, 2000 to 2003



- Plans reported changes in Emergency Services: Visits per 1,000 Members (Figure 31) between 0% and 33% from 2000 to 2001. The average increase was 12%; the average in 2001 was 189.63.
- Plans reported changes in Emergency Services: Visits per 1,000 Members (Figure 31) between 0% and 54% from 2001 to 2003. The average increase was 18%; the projected average in 2003 is 222.76.
- Tufts reported ED “units” per 1,000 members. More than one unit can occur per ED visit, and therefore, Tufts’ numbers are omitted from the plans’ averages and ranges (Figure 31).

**Figure 32. Emergency Services: Facility Costs per Encounter
(excludes MD costs), 2000 to 2003**



- Plans reported changes in Emergency Services Facility Costs per Encounter (Figure 32) between 8% and 125% from 2000 to 2001. The average increase was 39%; the average in 2001 was \$235.60.
- Plans reported changes in Emergency Services Facility Costs per Encounter (Figure 32) between 8% and 25% from 2001 to 2003. The average increase was 13%; the projected average in 2003 is \$257.52.
- Tufts reported facility costs per emergency room “unit.” More than one unit can occur per emergency room encounter and, therefore, Tufts’ numbers are omitted from the plans’ average and ranges (Figure 32).

Tables 4 and 5 on page 45 allow the reader to compare hospital and physician expenses and utilization for ED and outpatient surgery. One would expect that physician and hospital expenses PMPM combined would roughly correspond to changes in utilization. However, these charts do not reflect adjustments for changes in costs per unit of service.

Emergency Services

Emergency services increased from 12% to 26% from 200 to 2001. Expenditures for emergency physician's services did not always correspond with the increases in hospital costs or number of ED visits. Tufts measures utilization in units rather than ED visits (see Table 4).

Outpatient Surgery

The trend nationally has been for increasingly more surgery to be provided on an outpatient basis. Plans report disproportionate changes in their hospital costs, physician costs, and utilization. Tufts measures utilization in units rather than outpatient surgery encounters (see Table 5).

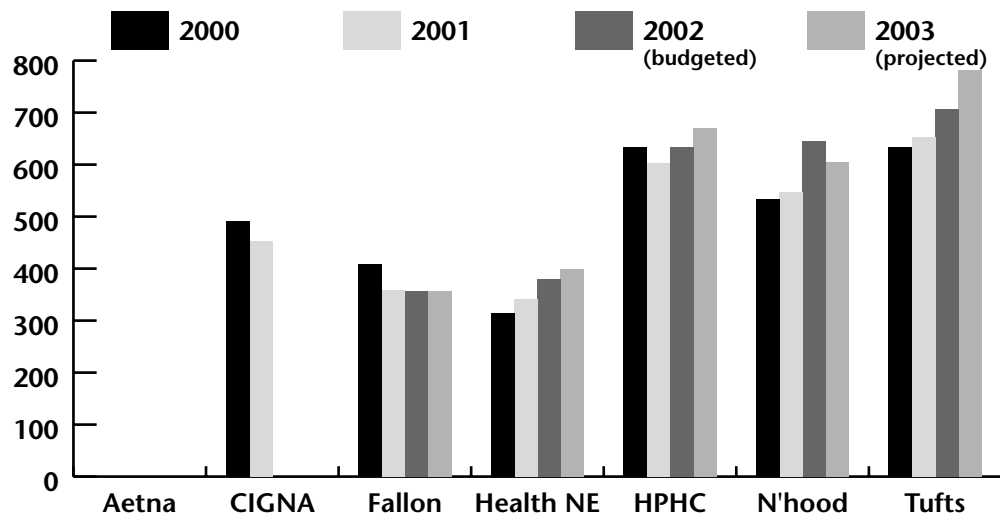
Table 4: Emergency Services, 2000-2001

| Outpatient Hospital Cost PMPM | | | | Physician Services Cost PMPM | | | Utilization per 1,000 Members | | |
|-------------------------------|--------|--------|----------------|------------------------------|--------|----------------|-------------------------------|--------|----------------|
| HMO | 2000 | 2001 | Percent Change | 2000 | 2001 | Percent Change | 2000 | 2001 | Percent Change |
| Aetna | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| CIGNA | \$1.81 | \$4.43 | 145% | \$1.03 | \$1.28 | 24% | 191.66 | 208.77 | 9% |
| Fallon | \$3.18 | \$3.78 | 19% | \$0.36 | \$0.43 | 19% | 73.07 | 79.37 | 9% |
| Health NE | \$2.28 | \$2.48 | 9% | \$2.21 | \$2.54 | 15% | 189.79 | 251.96 | 33% |
| HPHC | \$1.74 | \$1.95 | 12% | \$0.00 | \$0.00 | 0% | 200.27 | 199.85 | 0% |
| N'hood | \$3.80 | \$4.78 | 26% | \$1.42 | \$1.59 | 12% | 188.70 | 208.20 | 10% |
| Tufts | \$1.91 | \$2.16 | 13% | \$1.71 | \$1.85 | 8% | 200.29 | 202.86 | 1% |

Table 5: Outpatient Surgery, 2000-2001

| Outpatient Hospital Cost PMPM | | | | Physician Services Cost PMPM | | | Utilization per 1,000 Members | | |
|-------------------------------|------|-------|----------------|------------------------------|--------|----------------|-------------------------------|--------|----------------|
| HMO | 2000 | 2001 | Percent Change | 2000 | 2001 | Percent Change | 2000 | 2001 | Percent Change |
| Aetna | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| CIGNA | 6.71 | 7.67 | 14% | 8.06 | 12.13 | 50% | 115.96 | 117.77 | 2% |
| Fallon | 7.34 | 6.04 | -18% | 5.93 | \$6.40 | 8% | 132.27 | 97.78 | -26% |
| Health NE | 8.85 | 10.77 | 22% | 11.97 | 13.10 | 9% | 95.21 | 111.03 | 17% |
| HPHC | 6.52 | 7.18 | 10% | 4.80 | 5.24 | 9% | 101.55 | 139.43 | 37% |
| N'hood | 2.75 | 4.23 | 54% | 6.23 | 6.49 | 4% | 21.20 | 71.00 | 235% |
| Tufts | 8.74 | 10.08 | 15% | 6.39 | 6.62 | 4% | 468.74 | 485.07 | 3% |

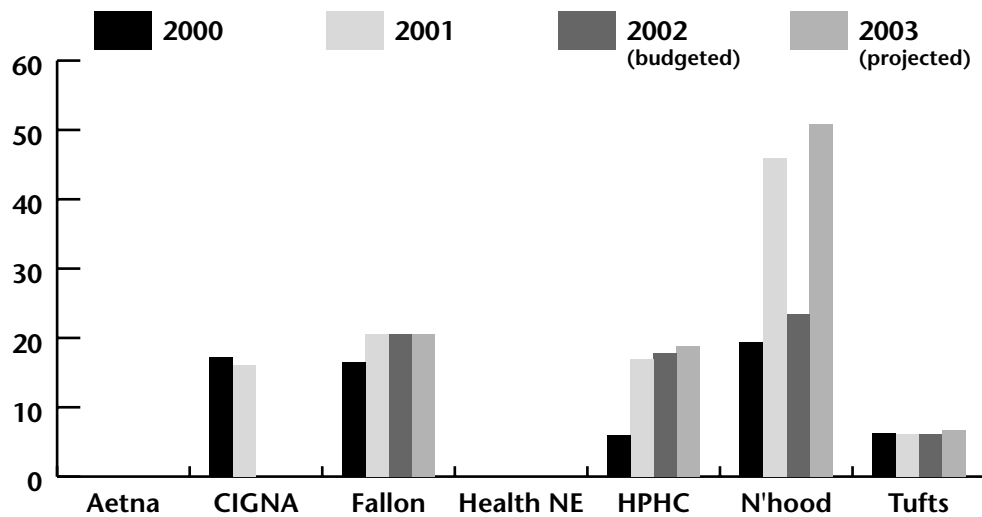
**Figure 33. Mental Health Visits per 1,000 Members,
2000 to 2003**



Outpatient: Mental Health/Substance Abuse

- Plans reported changes in Mental Health Visits per 1,000 Members (Figure 33) between -12% and 9% from 2000 to 2001 for an average decrease of 2%; the average in 2001 was 492.84.
- Plans reported changes in Mental Health Visits per 1,000 Members (Figure 33) between 0% and 20% from 2001 to 2003. The average increase was 11%; the projected average in 2003 is 562.26.

Figure 34. Substance Abuse Visits per 1,000 Members, 2000 to 2003



- Plans reported changes in Substance Abuse Visits per 1,000 Members (Figure 34) ambulatory visits per 1,000 members between -7% and 180% from 2000 to 2001. The average increase was 67%; the average in 2001 was 21.17.
- Plans reported changes in Substance Abuse Visits per 1,000 Members (Figure 34) between 0% and 11% from 2001 to 2003. The average increase was 7%; the projected average in 2003 is 24.22.

Table 6: Mental Health and Substance Abuse Cost and Utilization, 2000-2001

| HMO | Inpatient Hospital | | | | | | Outpatient Hospital | | | | | | Physician Services | | |
|-----------|------------------------|-------|----------------|-----------|--------|----------------|--------------------------|-------|----------------|-----------|--------|----------------|--------------------|--------|----------------|
| | Days per 1,000 Members | | | Cost PMPM | | | Visits per 1,000 Members | | | Cost PMPM | | | Cost PMPM | | |
| | 2000 | 2001 | Percent Change | 2000 | 2001 | Percent Change | 2000 | 2001 | Percent Change | 2000 | 2001 | Percent Change | 2000 | 2001 | Percent Change |
| Aetna | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| CIGNA | 18.05 | 22.02 | 22% | \$0.79 | \$0.79 | 0% | 507.3 | 468.3 | -8% | \$1.55 | \$1.55 | 0% | \$2.44 | \$2.47 | 1% |
| Fallon | 13.75 | 0.67 | -95% | \$1.42 | \$1.55 | 9% | 425.3 | 378.6 | -11% | \$0.24 | \$0.26 | 8% | \$2.29 | \$2.50 | 9% |
| Health NE | 38.80 | 51.65 | 33% | \$1.59 | \$1.92 | 21% | 314.4 | 341.9 | 9% | N/A | N/A | N/A | \$4.28 | \$4.33 | 1% |
| HPHC | 41.58 | 35.42 | -15% | \$1.81 | \$1.83 | 1% | 639.8 | 620.2 | -3% | \$0.24 | \$0.23 | -4% | \$4.51 | \$4.55 | 1% |
| N'hood | 41.30 | 25.10 | -39% | \$1.35 | \$1.07 | -21% | 552.9 | 594.0 | 7% | \$3.02 | \$3.01 | 0% | \$0.39 | \$0.39 | 0% |
| Tufts | 35.28 | 38.07 | 8% | \$2.15 | \$2.12 | -1% | 639.7 | 659.8 | 3% | \$0.49 | \$0.54 | 10% | \$2.69 | \$3.02 | 12% |

Table 6 allows the reader to compare changes in MH/SA utilization and expenditures from 2000 to 2001. Changes in hospital utilization and costs (whether inpatient or outpatient) should usually be roughly proportionate. Some or much of the variation may indicate changes in hospital reimbursement. If a plan pays its hospitals more per unit of care, you would expect costs PMPM to rise faster than utilization.

[Note: There are other possible reasons for disproportionate changes in costs and utilization. For example, MH/SA care and the financial risk for it may be carved out to a third party MH/SA vendor. A plan should be able to explain its trends.]

Ambulatory Care Visits and Physician Care

Total ambulatory visits include all outpatient visits (to hospitals and medical offices). While some plans report total ambulatory visits per 1,000 that are reasonable by national benchmarks, others do not.

- Plans reported changes in Total Ambulatory Visits per 1,000 Members (Figure 35) between -11% and 16% from 2000 to 2001. The average increase was 4%; the average in 2001 was 4,719.48.

Figure 35. Total Ambulatory Visits per 1,000 Members, 2000 to 2003

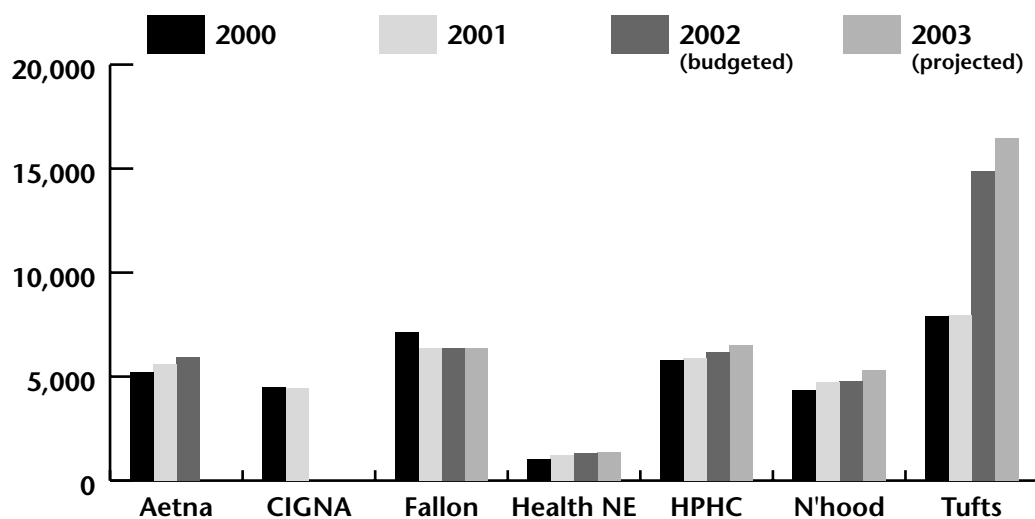
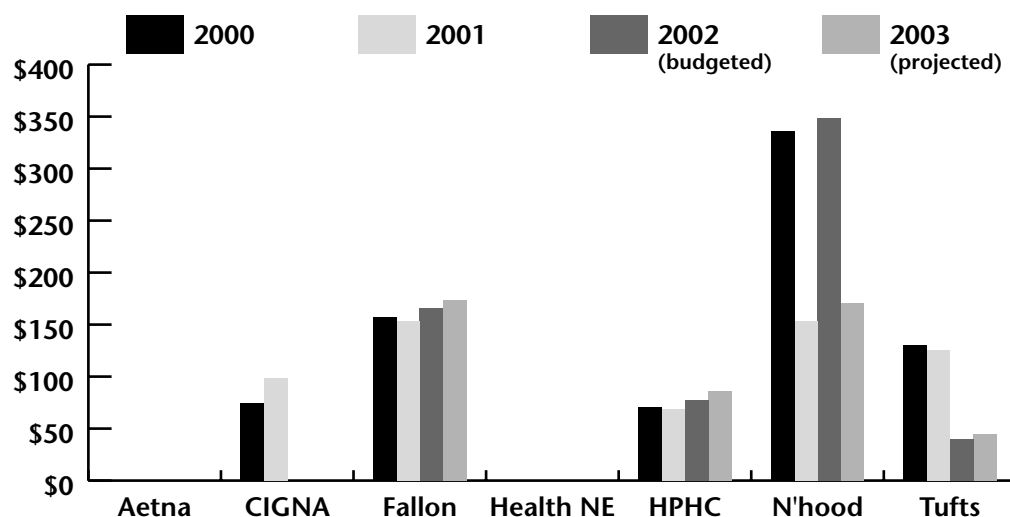
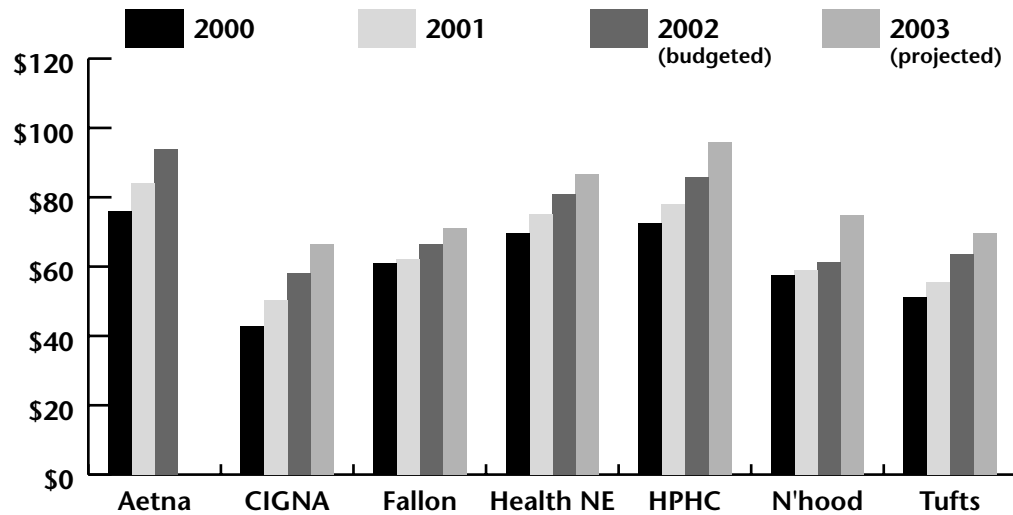


Figure 36. Total Ambulatory Visit Facility Costs per Encounter (excludes MD costs), 2000 to 2003



- Plans reported changes in Total Ambulatory Visits per 1,000 Members (see Figure 35 on page 49) between 0% and 12% from 2001 to 2003. The average increase was 9%; the projected average in 2003 is 4,887.22.
 - Tufts reported “units” instead of visits for some sub-categories of ambulatory care. More than one unit can occur per patient encounter and, therefore, Tufts’ numbers are omitted from the plans’ average and ranges (see Figure 35 on page 49).
-
- Plans reported changes in Total Ambulatory Visit Facility Costs per Encounter (Figure 36) between -54% and 32% from 2000 to 2001 for an average decrease of 7%; the average in 2001 was \$118.34.
 - Plans reported changes in Total Ambulatory Visit Facility Costs per Encounter (Figure 36) between 12% and 25% from 2001 to 2003. The average increase was 17%; the projected average in 2003 is \$143.48.
 - Tufts reported “units” instead of visits for some sub-categories of ambulatory care. More than one unit can occur per patient encounter, which will affect the facility costs per encounter/unit and therefore Tufts’ numbers are omitted from the plans’ average and ranges (Figure 36).

Figure 37. Total Physician Services (in and outpatient) Expenses PMPM, 2000 to 2003



Physician Services

Total physician services expenses include costs for all physician services.

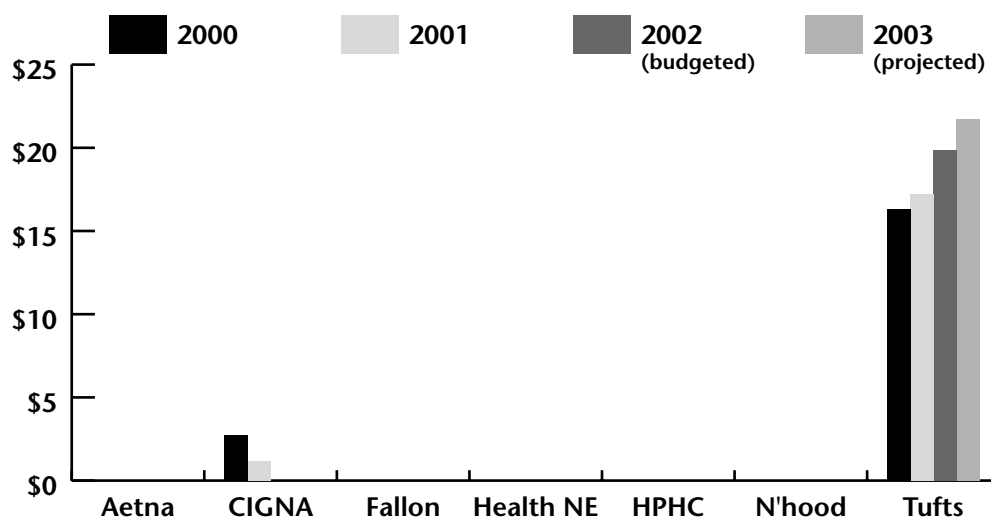
- Plans reported changes in Total Physician Services Expenses PMPM (Figure 37) between 2% and 17% from 2000 to 2001. The average increase was 8%; the average in 2001 was \$66.31.
- Plans reported changes in Total Physician Services Expenses PMPM (Figure 37) between 14% and 32% from 2001 to 2003. The average increase was 23%; the projected average in 2003 is \$77.47.
- As in prior years, physician services represented roughly one-third of total PMPM costs for all plans and 40% of total medical costs, making it an influential spending category (Figure 37).

Incentive Pool/Withhold

Few plans appear to be offering incentives to physicians for performing well. It is important to remember, however, that all reimbursement mechanisms, whether they are capitation or fee-for-service, create incentives. Furthermore, all capitation arrangements are not the same. A broad capitation arrangement in which primary care physicians are rewarded for overall utilization reductions is better than a limited capitation arrangement that could, for example, encourage primary care physicians to shift care from primary care to more expensive settings.

[Note: Ask your health plan how they reimburse physicians.]

Figure 38. Incentive Pool/Withhold Adjustment Expenses PMPM, 2000 to 2003



Outpatient Pharmacy

Higher-than-average pharmacy expenditures may be attributed to either high drug utilization rates and/or high costs per prescription. Higher-than-average drug utilization may be due to several reasons, for example, poor oversight of a plan's physicians' prescribing practices, or it may reflect an alternative to utilization of other care types.

Four years of pharmacy data was available only for total outpatient prescription drug expenses PMPM. The remaining pharmacy bar graphs use only three years of data and therefore do not include bullets that describe changes over time.

Figure 39. Total (retail and mail order) Outpatient Prescription Drug Expenses PMPM, 2000 to 2003

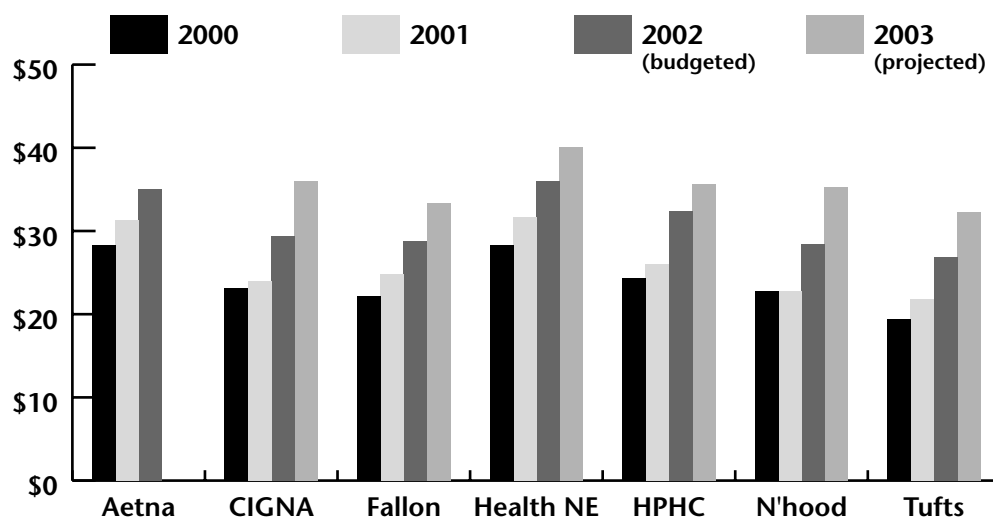
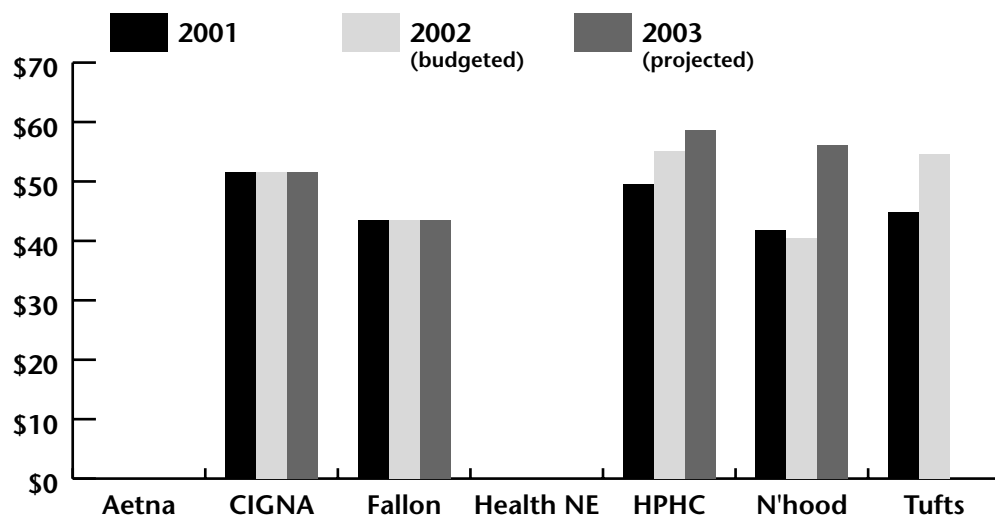


Figure 40. Total Retail Discounted Costs per Prescription per Year, 2001 to 2003



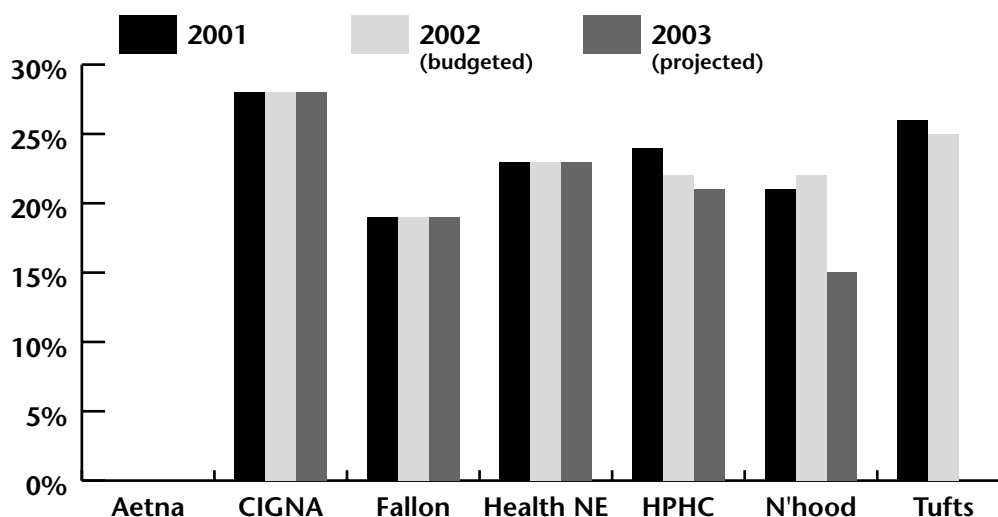
- Plans reported changes in Total Outpatient Prescription Drug Expenses PMPM (see Figure 39 on page 55) between 0% and 12% from 2000 to 2001. The average increase was 8%; the average in 2001 was \$26.07.
- Plans reported changes in Total Outpatient Prescription Drug Expenses PMPM (see Figure 39 on page 55) between 26% and 55% from 2001 to 2003. The average increase was 42%; the projected average in 2003 is \$35.44.
- On average, outpatient prescription costs composed 15% of total medical costs and 13% of total PMPM dollars (see Figure 39 on page 55).

A limited list of drugs for which plan physicians can prescribe (formulary) might be cost-effective and provide high-quality care, but it is important to know how and who decides what drugs will be on a plan's formulary.

[Note: Ask your plan what it does to assure autonomy for the committee that determines a plan's formulary so there are not incentives to eliminate expensive drugs that are effective and essential or similar decisions not made on a clinical basis.]

- Cigna's costs are average wholesale (see Figure 40).

Figure 41. Employee Copayments as a Percent of Total Net Costs, 2001 to 2003



The majority of plans recorded increases in the number of prescriptions per member per year since 2000. High drug utilization may indicate ineffective utilization management or, on the other hand, a substitution of other services with pharmaceuticals. Ask plans whether or not they conduct physician detailing to identify unusual prescribing patterns. If they do, what does the plan do to correct this, and more importantly, what are the results? Some physician detailing produce better results than others.

Only two plans reported three years of information on the number of retail scripts per eligible member (2001 actual, 2002 budgeted, and 2003 projected). Cigna projected 22% and 23% increases in the number of scripts per member from 2001-2002 and 2002-2003 respectively. Fallon predicted a 16% increase for each year. Four plans reported the number of scripts per member for 2001. The average number of scripts was very close to eight for all four plans.

A plan's costs PMPM is influenced not only by the cost per drug and number of scripts per member. Copayments vary, changing the proportion of drug costs paid by a plan's members. The proportion of drug costs that members pay can change if the copayment changes and/or if drug costs or utilization changes (even if copayments remain a fixed dollar amount).

- Employee Copayments as a Percent of Total Net Costs (Figure 41) hover around one-fifth.
- The increases in Employee Copayments as a Percent of Total Net Costs (Figure 41) have generally not kept pace with the increases in total costs.

Production Notes

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Appendix to the Massachusetts HMO Rate Analysis: 2000, 2001, 2002 (budgeted) and 2003 (projected)

[Note: The tables in this appendix include most of the numbers as reported by the plans. The report does not include plans' numbers in instances in which numbers were confirmed incomplete or otherwise non comparable. Therefore, the rows with the Percent Changes, and the columns with the Average, HI, and Low numbers in this appendix do not always match the corresponding graph/numbers in the report.]

Fig. 1. HMO Enrollment: Total Members

| | Aetna | Cigna | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|--------|--------|---------|-----------|---------|--------|---------|---------|---------|--------|
| 2000 | 51,146 | 53,846 | 154,672 | 80,520 | 768,091 | 12,165 | 546,715 | 238,165 | 768,091 | 12,165 |
| 2001 | 78,372 | 77,123 | 138,534 | 72,685 | 539,501 | 15,686 | 517,008 | 205,558 | 539,501 | 15,686 |
| 2002 Budgeted | 58,960 | 84,835 | 138,534 | 73,852 | 471,327 | 12,165 | 539,816 | 197,070 | 539,816 | 12,165 |
| 2003 Projected | N/R | 93,319 | 138,534 | 73,852 | 494,893 | 15,686 | 539,816 | 226,017 | 539,816 | 15,686 |
| % chn 00 to 01 | 53% | 43% | -10% | -10% | -30% | 29% | -5% | -14% | -30% | 29% |
| % chn 01 to 03 | N/A | 21% | 0% | 2% | -8% | 0% | 4% | 10% | 0% | 0% |

Fig. 2. Total Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|
| 2000 | \$238.26 | \$148.68 | \$148.09 | \$180.78 | \$170.49 | \$168.96 | \$168.17 | \$174.78 | \$238.26 | \$148.09 |
| 2001 | \$263.56 | \$170.16 | \$165.43 | \$195.15 | \$192.51 | \$170.07 | \$187.27 | \$192.02 | \$263.56 | \$165.43 |
| 2002 Budgeted | \$294.13 | \$195.36 | \$181.44 | \$207.14 | \$216.21 | \$187.89 | \$216.80 | \$214.14 | \$294.13 | \$181.44 |
| 2003 Projected | N/R | \$223.86 | \$196.11 | \$224.49 | \$243.21 | \$221.96 | \$238.48 | \$224.69 | \$243.21 | \$196.11 |
| % chn 00 to 01 | 11% | 14% | 12% | 8% | 13% | 1% | 11% | 10% | 14% | 1% |
| % chn 01 to 03 | N/A | 32% | 19% | 15% | 26% | 31% | 27% | 25% | 32% | 15% |

Fig. 3. Total Non-Medical Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|---------|
| 2000 | \$43.13 | \$17.56 | \$3.92 | \$32.87 | \$15.30 | \$21.87 | \$19.97 | \$22.09 | \$43.13 | \$3.92 |
| 2001 | \$47.70 | \$18.59 | \$17.31 | \$29.36 | \$27.02 | \$19.34 | \$22.69 | \$26.00 | \$47.70 | \$17.31 |
| 2002 Budgeted | \$53.24 | \$19.77 | \$20.72 | \$28.43 | \$30.27 | \$21.64 | \$27.38 | \$28.78 | \$53.24 | \$19.77 |
| 2003 Projected | N/R | \$20.72 | \$21.55 | \$30.45 | \$32.14 | \$24.41 | \$25.53 | \$25.80 | \$32.14 | \$20.72 |
| % chn 00 to 01 | 11% | 6% | 342% | -11% | 77% | -12% | 14% | 61% | 342% | -12% |
| % chn 01 to 03 | N/A | 11% | 24% | 4% | 19% | 26% | 13% | 16% | 26% | 4% |

Fig 4. HMO Percent Change in Med., Non-Med and Total Expenses PMPM (2000 - 2001)

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|-------------------------------|-------|-------|--------|-----------|-------|--------|-------|---------|--------|--------|
| Tot Exp PMPM % Change | 10.6% | 14.4% | 11.7% | 7.9% | 12.9% | 0.7% | 11.4% | 10.0% | 14.4% | 0.7% |
| Tot Med Exp PMPM % Change | 10.6% | 15.6% | 2.7% | 12.1% | 6.6% | 2.5% | 10.3% | 8.6% | 15.6% | 2.5% |
| Tot Non-Med Exp PMPM % Change | 10.6% | 5.9% | 214.1% | -10.7% | 76.6% | -11.6% | 13.6% | 42.7% | 214.1% | -11.6% |

Fig. 5. Total Medical Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|
| 2000 | \$195.13 | \$131.12 | \$144.17 | \$147.91 | \$155.19 | \$147.10 | \$148.20 | \$145.62 | \$195.13 | \$131.12 |
| 2001 | \$215.86 | \$151.57 | \$148.12 | \$165.79 | \$165.49 | \$150.74 | \$163.40 | \$157.52 | \$215.86 | \$148.12 |
| 2002 Budgeted | \$240.89 | \$175.59 | \$160.72 | \$178.71 | \$185.94 | \$166.25 | \$188.13 | \$175.89 | \$240.89 | \$160.72 |
| 2003 Projected | N/R | \$203.14 | \$174.56 | \$194.04 | \$211.07 | \$197.55 | \$210.57 | \$198.49 | \$211.07 | \$174.56 |
| % chn 00 to 01 | 11% | 16% | 3% | 12% | 7% | 2% | 10% | 9% | 16% | 2% |
| % chn 01 to 03 | N/A | 34% | 18% | 17% | 28% | 31% | 29% | 26% | 34% | 17% |

Fig. 6. Distribution of Massachusetts HMOs' Average Medical Spending PMPM, 2001 (See Table 2)

Fig. 7. Total Inpatient Hospital Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|---------|
| 2000 | \$46.22 | \$30.16 | \$25.04 | \$25.40 | \$29.76 | \$43.38 | \$30.22 | \$32.88 | \$46.22 | \$25.04 |
| 2001 | \$51.13 | \$33.22 | \$27.32 | \$31.33 | \$31.40 | \$39.43 | \$34.16 | \$35.43 | \$51.13 | \$27.32 |
| 2002 Budgeted | \$57.06 | \$38.48 | \$29.23 | \$31.89 | \$32.74 | \$49.45 | \$36.66 | \$39.36 | \$57.06 | \$29.23 |
| 2003 Projected | N/R | \$44.05 | \$31.28 | \$34.06 | \$34.93 | \$47.60 | \$40.98 | \$38.82 | \$47.60 | \$31.28 |
| % chn 00 to 01 | 11% | 10% | 9% | 23% | 6% | -9% | 13% | 9% | 23% | -9% |
| % chn 01 to 03 | N/A | 33% | 14% | 9% | 11% | 21% | 20% | 18% | 33% | 9% |

Fig. 8. Total Acute Admissions per 1,000 members

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|-------|--------|-----------|------|--------|-------|---------|------|------|
| 2000 | 69.1 | 55.9 | 47.5 | 63.9 | 62.4 | 58.4 | 55.9 | 59.0 | 69.1 | 47.5 |
| 2001 | 72.8 | 56.8 | 47.5 | 71.3 | 60.9 | 60.6 | 56.4 | 60.9 | 72.8 | 47.5 |
| 2002 Projected | 77.0 | N/R | 47.4 | 70.3 | 62.4 | 60.9 | 60.3 | 63.1 | 77.0 | 47.4 |
| 2003 Projected | N/R | N/R | 47.4 | 72.4 | 60.9 | 63.1 | 66.6 | 62.1 | 72.4 | 47.4 |
| % chn 00 to 01 | 5% | 2% | 0% | 11% | -2% | 4% | 1% | 3% | 11% | -2% |
| % chn 01 to 03 | N/A | N/A | 0% | 1% | 0% | 4% | 18% | 5% | 18% | 0% |

Fig. 9. Total Inpatient Acute Care Days Per 1,000 Members

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|-------|--------|-----------|-------|--------|-------|---------|-------|-------|
| 2000 | 270.3 | 227.4 | 233.5 | 267.9 | 244.7 | 268.5 | 231.3 | 249.1 | 270.3 | 227.4 |
| 2001 | 284.6 | 227.8 | 181.6 | 322.8 | 252.8 | 256.4 | 242.6 | 252.7 | 322.8 | 181.6 |
| 2002 Budgeted | 301.1 | N/R | 181.1 | 320.6 | 244.7 | 281.7 | 237.3 | 261.1 | 320.6 | 181.1 |
| 2003 Projected | N/R | N/R | 181.1 | 331.5 | 244.4 | 282.7 | 262.2 | 260.4 | 331.5 | 181.1 |
| % chn 00 to 01 | 5% | 0% | -22% | 20% | 3% | -5% | 5% | 1% | 20% | -22% |
| % chn 01 to 03 | N/A | N/A | 0% | 3% | -3% | 10% | 8% | 3% | 10% | -3% |

Fig. 10. Acute Care: ALOS

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|-------|--------|-----------|------|--------|-------|---------|------|------|
| 2000 | 3.91 | 4.07 | 4.92 | 4.19 | 3.92 | 4.60 | 4.14 | 4.25 | 4.92 | 3.91 |
| 2001 | 3.91 | 4.01 | 3.82 | 4.53 | 4.15 | 4.23 | 4.31 | 4.14 | 4.53 | 3.82 |
| 2002 Budgeted | 3.91 | N/R | 3.82 | 4.56 | 3.92 | 4.63 | 3.93 | 4.13 | 4.63 | 3.82 |
| 2003 Projected | N/R | N/R | N/R | 4.58 | 4.01 | 4.48 | 3.93 | 4.25 | 4.58 | 3.93 |
| % chn 00 to 01 | 0% | -1% | -22% | 8% | 6% | -8% | 4% | -2% | 8% | -22% |
| % chn 01 to 03 | N/A | N/A | N/A | 1% | -3% | 6% | -9% | -1% | 6% | -9% |

Fig. 11. Inpatient Hospital Medical/Surgical Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|---------|---------|-----------|---------|---------|---------|---------|---------|---------|
| 2000 | N/R | \$24.60 | \$16.49 | \$18.72 | \$20.10 | \$26.53 | \$20.96 | \$21.23 | \$26.53 | \$16.49 |
| 2001 | N/R | \$26.51 | \$16.95 | \$23.01 | \$21.63 | \$28.89 | \$24.49 | \$23.58 | \$28.89 | \$16.95 |
| 2002 Budgeted | N/R | \$27.94 | \$18.14 | \$23.30 | \$20.09 | \$29.69 | \$25.73 | \$24.15 | \$29.69 | \$18.14 |
| 2003 Projected | N/R | \$35.31 | \$19.41 | \$24.69 | \$23.47 | \$34.96 | \$28.27 | \$27.69 | \$35.31 | \$19.41 |
| % chn 00 to 01 | N/A | 8% | 3% | 23% | 8% | 9% | 17% | 11% | 23% | 3% |
| % chn 01 to 03 | N/A | 33% | 15% | 7% | 9% | 21% | 15% | 17% | 33% | 7% |

Fig. 12. Physician Services: Inpatient Surgery Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|--------|--------|-----------|--------|--------|--------|---------|--------|--------|
| 2000 | N/R | \$6.65 | \$6.26 | N/R | \$2.21 | \$5.08 | \$4.77 | \$4.99 | \$6.65 | \$2.21 |
| 2001 | N/R | \$7.63 | \$6.78 | N/R | \$2.25 | \$5.24 | \$4.88 | \$5.36 | \$7.63 | \$2.25 |
| 2002 Budgeted | N/R | \$6.65 | \$7.25 | N/R | \$2.60 | \$5.49 | \$5.49 | \$5.50 | \$7.25 | \$2.60 |
| 2003 Projected | N/R | \$7.63 | \$7.76 | N/R | \$2.73 | \$6.89 | \$6.31 | \$6.26 | \$7.76 | \$2.73 |
| % chn 00 to 01 | N/A | 15% | 8% | N/A | 2% | 3% | 2% | 6% | 15% | 2% |
| % chn 01 to 03 | N/A | 0% | 14% | N/A | 21% | 31% | 29% | 19% | 31% | 0% |

Fig. 13. Inpatient Maternity Wellborn Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|--------|--------|-----------|--------|--------|--------|---------|--------|--------|
| 2000 | N/R | \$2.75 | \$2.46 | \$3.55 | \$4.90 | \$6.96 | \$4.52 | \$4.19 | \$6.96 | \$2.46 |
| 2001 | N/R | \$3.61 | \$2.58 | \$3.92 | \$4.80 | \$6.15 | \$4.89 | \$4.33 | \$6.15 | \$2.58 |
| 2002 Budgeted | N/R | \$4.20 | \$2.76 | \$3.53 | \$5.37 | \$7.79 | \$5.01 | \$4.78 | \$7.79 | \$2.76 |
| 2003 Projected | N/R | \$4.81 | \$2.95 | \$3.37 | \$5.21 | \$7.44 | \$5.98 | \$4.96 | \$7.44 | \$2.95 |
| % chn 00 to 01 | N/A | 31% | 5% | 10% | -2% | -12% | 8% | 7% | 31% | -12% |
| % chn 01 to 03 | N/A | 33% | 14% | -14% | 9% | 21% | 22% | 14% | 33% | -14% |

Fig. 14. Inpatient Maternity Sick Newborn Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|--------|--------|--------|-----------|--------|--------|-------|---------|--------|--------|
| 2000 | N/R | \$0.81 | \$2.45 | \$1.05 | \$1.33 | \$6.85 | N/R | \$2.50 | \$6.85 | \$0.81 |
| 2001 | N/R | \$0.92 | \$2.86 | \$1.50 | \$1.29 | \$1.06 | N/R | \$1.53 | \$2.86 | \$0.92 |
| 2002 Budgeted | \$7.00 | \$1.07 | \$3.06 | \$2.02 | \$1.46 | \$7.67 | N/R | \$3.71 | \$7.67 | \$1.07 |
| 2003 Projected | N/R | \$1.23 | \$3.27 | \$2.58 | \$1.40 | \$1.29 | N/R | \$1.95 | \$3.27 | \$1.23 |
| % chn 00 to 01 | N/A | 14% | 17% | 43% | -3% | -85% | N/A | -3% | 43% | -85% |
| % chn 01 to 03 | N/A | 34% | 14% | 72% | 9% | 22% | N/A | 30% | 72% | 9% |

Fig. 15. Inpatient Mental Health/Substance Abuse Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|--------|--------|-----------|--------|--------|--------|---------|--------|--------|
| 2000 | N/R | \$0.79 | \$1.42 | \$1.59 | \$1.81 | \$1.35 | \$2.15 | \$1.52 | \$2.15 | \$0.79 |
| 2001 | N/R | \$0.79 | \$1.55 | \$1.92 | \$1.83 | \$1.07 | \$2.12 | \$1.55 | \$2.12 | \$0.79 |
| 2002 Budgeted | N/R | \$0.82 | \$1.66 | \$2.09 | \$2.07 | \$2.40 | \$2.15 | \$1.87 | \$2.40 | \$0.82 |
| 2003 Projected | N/R | \$0.85 | \$1.77 | \$2.34 | \$2.86 | \$1.18 | \$2.75 | \$1.96 | \$2.86 | \$0.85 |
| % chn 00 to 01 | N/A | 0% | 9% | 21% | 1% | -21% | -1% | 1% | 21% | -21% |
| % chn 01 to 03 | N/A | 8% | 14% | 22% | 56% | 10% | 30% | 23% | 56% | 8% |

Fig. 16. Physician Services: Mental Health/Substance Abuse Expenses PMPM:

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|--------|--------|-----------|--------|--------|--------|---------|--------|--------|
| 2000 | N/R | \$2.44 | \$2.29 | \$4.28 | \$4.51 | \$0.39 | \$2.69 | \$2.77 | \$4.51 | \$0.39 |
| 2001 | N/R | \$2.77 | \$2.50 | \$4.33 | \$4.55 | \$0.39 | \$3.02 | \$2.93 | \$4.55 | \$0.39 |
| 2002 Budgeted | N/R | \$2.56 | \$2.68 | \$4.53 | \$5.56 | \$0.70 | \$3.54 | \$3.26 | \$5.56 | \$0.70 |
| 2003 Projected | N/R | \$2.65 | \$2.86 | \$4.70 | \$7.11 | \$0.43 | \$4.02 | \$3.63 | \$7.11 | \$0.43 |
| % chn 00 to 01 | N/A | 14% | 9% | 1% | 1% | 0% | 12% | 6% | 14% | 0% |
| % chn 01 to 03 | N/A | -4% | 14% | 9% | 56% | 10% | 33% | 20% | 56% | -4% |

Fig. 17. Mental Health Admissions per 1,000 members

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|-------|--------|-----------|------|--------|-------|---------|-----|------|
| 2000 | N/R | 3.2 | 1.2 | 4.0 | 4.0 | 3.6 | 3.5 | 3.2 | 4.0 | 1.2 |
| 2001 | N/R | 3.6 | 0.1 | 4.1 | 3.3 | 2.7 | 3.5 | 2.9 | 4.1 | 0.1 |
| 2002 Budgeted | N/R | N/R | 0.1 | 3.7 | 4.0 | 4.4 | 3.7 | 3.2 | 4.4 | 0.1 |
| 2003 Projected | N/R | N/R | 0.1 | 3.8 | 3.3 | 2.8 | 4.1 | 2.8 | 4.1 | 0.1 |
| % chn 00 to 01 | N/A | 11% | -93% | 3% | -18% | -25% | -1% | -20% | 11% | -93% |
| % chn 01 to 03 | N/A | N/A | 0% | -8% | 0% | 4% | 18% | 3% | 18% | -8% |

Fig. 18. Substance Abuse Admissions per 1,000 members

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|-------|--------|-----------|------|--------|-------|---------|-----|------|
| 2000 | N/R | 1.1 | 0.9 | 2.9 | 2.7 | 3.2 | 2.1 | 2.2 | 3.2 | 0.9 |
| 2001 | N/R | 1.4 | 0.1 | 3.7 | 2.2 | 0.1 | 2.3 | 1.6 | 3.7 | 0.1 |
| 2002 Budgeted | N/R | N/R | 0.1 | 3.6 | 2.7 | 3.9 | 2.5 | 2.6 | 3.9 | 0.1 |
| 2003 Projected | N/R | N/R | 0.1 | 4.1 | 2.2 | 0.1 | 2.8 | 1.8 | 4.1 | 0.1 |
| % chn 00 to 01 | N/A | 26% | -91% | 29% | -18% | -97% | 12% | -23% | 29% | -97% |
| % chn 01 to 03 | N/A | N/A | 0% | 9% | 0% | 0% | 18% | 5% | 18% | 0% |

Fig. 19. Mental Health Inpatient Acute Days per 1,000 members

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|-------|--------|-----------|------|--------|-------|---------|------|------|
| 2000 | N/R | 14.9 | 9.8 | 28.0 | 30.8 | 31.7 | 27.5 | 23.8 | 31.7 | 9.8 |
| 2001 | N/R | 17.4 | 0.2 | 36.2 | 25.1 | 24.9 | 29.5 | 22.2 | 36.2 | 0.2 |
| 2002 Budgeted | N/R | N/R | 0.2 | 32.6 | 30.8 | 38.3 | 28.8 | 26.1 | 38.3 | 0.2 |
| 2003 Projected | N/R | N/R | 0.2 | 34.8 | 27.8 | 27.4 | 31.8 | 24.4 | 34.8 | 0.2 |
| % chn 00 to 01 | N/A | 17% | -98% | 30% | -19% | -21% | 7% | -14% | 30% | -98% |
| % chn 01 to 03 | N/A | N/A | 0% | -4% | 11% | 10% | 8% | 5% | 11% | -4% |

Fig. 20. Substance Abuse Inpatient Acute Days per 1,000 members

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|-------|--------|-----------|------|--------|-------|---------|------|------|
| 2000 | N/R | 3.2 | 3.9 | 10.8 | 10.8 | 9.6 | 7.8 | 7.7 | 10.8 | 3.2 |
| 2001 | N/R | 4.6 | 0.5 | 15.4 | 10.4 | 0.2 | 8.6 | 6.6 | 15.4 | 0.2 |
| 2002 Budgeted | N/R | N/R | 0.5 | 14.6 | 10.8 | 11.6 | 8.4 | 9.2 | 14.6 | 0.5 |
| 2003 Projected | N/R | N/R | 0.5 | 16.1 | 11.5 | 0.2 | 9.3 | 7.5 | 16.1 | 0.2 |
| % chn 00 to 01 | N/A | 44% | -87% | 42% | -4% | -98% | 11% | -15% | 44% | -98% |
| % chn 01 to 03 | N/A | N/A | 0% | 5% | 11% | 0% | 8% | 5% | 11% | 0% |

Fig. 21. Mental Health Inpatient facility costs per day (excluding physician costs)

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|----------|------------|-----------|----------|----------|----------|----------|------------|----------|
| 2000 | N/R | \$558.62 | \$576.29 | \$558.00 | \$614.57 | \$525.00 | \$625.69 | \$576.36 | \$625.69 | \$525.00 |
| 2001 | N/R | \$473.20 | \$1,282.41 | \$621.00 | \$683.56 | \$510.00 | \$607.82 | \$696.33 | \$1,282.41 | \$473.20 |
| 2002 Budgeted | N/R | N/R | \$1,346.53 | \$604.00 | \$685.00 | \$771.00 | \$676.49 | \$816.60 | \$1,346.53 | \$604.00 |
| 2003 Projected | N/R | N/R | \$1,413.86 | \$606.00 | \$739.34 | \$510.00 | \$747.45 | \$803.33 | \$1,413.86 | \$510.00 |
| % chn 00 to 01 | N/A | -15% | 123% | 11% | 11% | -3% | -3% | 21% | 123% | -15% |
| % chn 01 to 03 | N/A | N/A | 10% | -2% | 8% | 0% | 23% | 8% | 23% | -2% |

Fig. 22. Substance Abuse Inpatient facility costs per day (excluding physician costs)

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|----------|------------|-----------|----------|----------|----------|----------|------------|----------|
| 2000 | N/R | \$629.52 | \$461.85 | \$411.00 | \$374.72 | \$143.00 | \$613.98 | \$439.01 | \$629.52 | \$143.00 |
| 2001 | N/R | \$436.90 | \$1,297.03 | \$380.00 | \$524.53 | \$593.00 | \$651.19 | \$647.11 | \$1,297.03 | \$380.00 |
| 2002 Budgeted | N/R | N/R | \$1,361.88 | \$410.00 | \$410.20 | \$209.00 | \$724.76 | \$623.17 | \$1,361.88 | \$209.00 |
| 2003 Projected | N/R | N/R | \$1,429.97 | \$396.00 | \$567.33 | \$593.00 | \$800.79 | \$757.42 | \$1,429.97 | \$396.00 |
| % chn 00 to 01 | N/A | -31% | 181% | -8% | 40% | 315% | 6% | 84% | 315% | -31% |
| % chn 01 to 03 | N/A | N/A | 10% | 4% | 8% | 0% | 23% | 9% | 23% | 0% |

Fig. 23. Mental Health/Substance Abuse Intermediate Care Visits per 1,000 members

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|-------|--------|-----------|------|--------|-------|---------|-------|------|
| 2000 | N/R | N/R | N/R | 102.0 | 9.2 | 9.3 | 14.5 | 33.8 | 102.0 | 9.2 |
| 2001 | N/R | N/R | N/R | 88.5 | 14.9 | 10.0 | 12.6 | 31.5 | 88.5 | 10.0 |
| 2002 Budgeted | N/R | N/R | N/R | 118.1 | 9.2 | 9.3 | 12.3 | 37.2 | 118.1 | 9.2 |
| 2003 Projected | N/R | N/R | N/R | 127.1 | 16.5 | 10.9 | 13.6 | 42.0 | 127.1 | 10.9 |
| % chn 00 to 01 | N/A | N/A | N/A | -13% | 61% | 8% | -13% | 11% | 61% | -13% |
| % chn 01 to 03 | N/A | N/A | N/A | 44% | 11% | 9% | 8% | 18% | 44% | 8% |

Fig. 24. Total Outpatient Hospital Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|---------|
| 2000 | \$31.69 | \$29.44 | \$27.98 | \$12.30 | \$22.84 | \$16.16 | \$23.37 | \$23.40 | \$31.69 | \$12.30 |
| 2001 | \$35.05 | \$38.21 | \$26.85 | \$15.59 | \$23.87 | \$21.93 | \$26.26 | \$26.82 | \$38.21 | \$15.59 |
| 2002 Budgeted | \$39.12 | \$44.18 | \$28.73 | \$16.83 | \$28.56 | \$19.58 | \$29.57 | \$29.51 | \$44.18 | \$16.83 |
| 2003 Projected | N/R | \$50.49 | \$30.74 | \$18.73 | \$35.01 | \$29.98 | \$33.85 | \$33.13 | \$50.49 | \$18.73 |
| % chn 00 to 01 | 11% | 30% | -4% | 27% | 5% | 36% | 12% | 17% | 36% | -4% |
| % chn 01 to 03 | N/A | 32% | 14% | 20% | 47% | 37% | 29% | 30% | 47% | 14% |

Fig. 25. Outpatient Hospital Surgical Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|---------|--------|-----------|---------|--------|---------|---------|---------|--------|
| 2000 | N/R | \$6.71 | \$7.34 | \$8.85 | \$6.52 | \$2.75 | \$8.74 | \$6.82 | \$8.85 | \$2.75 |
| 2001 | N/R | \$7.67 | \$6.04 | \$10.77 | \$7.18 | \$4.23 | \$10.08 | \$7.66 | \$10.77 | \$4.23 |
| 2002 Budgeted | N/R | \$8.90 | \$6.46 | \$11.77 | \$8.15 | \$2.97 | \$12.04 | \$8.38 | \$12.04 | \$2.97 |
| 2003 Projected | N/R | \$10.21 | \$6.92 | \$13.08 | \$10.54 | \$5.56 | \$13.11 | \$9.90 | \$13.11 | \$5.56 |
| % chn 00 to 01 | N/A | 14% | -18% | 22% | 10% | 54% | 15% | 16% | 54% | -18% |
| % chn 01 to 03 | N/A | 33% | 15% | 21% | 47% | 31% | 30% | 30% | 47% | 15% |

Fig. 26. Physician Services: Outpatient Surgery Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|---------|--------|-----------|--------|--------|--------|---------|---------|--------|
| 2000 | N/R | \$8.06 | \$5.93 | \$11.97 | \$4.80 | \$6.23 | \$6.39 | \$7.23 | \$11.97 | \$4.80 |
| 2001 | N/R | \$12.13 | \$6.40 | \$13.10 | \$5.24 | \$6.49 | \$6.62 | \$8.33 | \$13.10 | \$5.24 |
| 2002 Budgeted | N/R | \$14.07 | \$6.85 | \$14.32 | \$5.64 | \$6.74 | \$7.75 | \$9.23 | \$14.32 | \$5.64 |
| 2003 Projected | N/R | \$16.14 | \$7.33 | \$15.62 | \$6.34 | \$8.53 | \$8.56 | \$10.42 | \$16.14 | \$6.34 |
| % chn 00 to 01 | N/A | 50% | 8% | 9% | 9% | 4% | 4% | 14% | 50% | 4% |
| % chn 01 to 03 | N/A | 33% | 15% | 19% | 21% | 31% | 29% | 25% | 33% | 15% |

Fig. 27. Outpatient Surgery Visits per 1,000 members

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|-------|--------|-----------|-------|--------|-------|---------|-------|------|
| 2000 | N/R | 116.0 | 132.3 | 95.2 | 101.6 | 21.2 | 468.7 | 155.8 | 468.7 | 21.2 |
| 2001 | N/R | 117.8 | 97.8 | 111.0 | 139.4 | 71.0 | 485.1 | 170.3 | 485.1 | 71.0 |
| 2002 Budgeted | N/R | N/R | 97.5 | 116.6 | 146.4 | 22.0 | 702.4 | 217.0 | 702.4 | 22.0 |
| 2003 Projected | N/R | N/R | 97.5 | 123.2 | 153.8 | 85.9 | 776.1 | 247.3 | 776.1 | 85.9 |
| % chn 00 to 01 | N/A | 2% | -26% | 17% | 37% | 235% | 3% | 45% | 235% | -26% |
| % chn 01 to 03 | N/A | N/A | 0% | 11% | 10% | 21% | 60% | 20% | 60% | 0% |

Fig. 28. Surgical Ambulatory Visit facility costs per encounter (excludes physician fees)

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|----------|------------|------------|----------|------------|----------|------------|------------|----------|
| 2000 | N/R | \$694.60 | \$1,002.82 | \$1,166.00 | \$833.05 | \$1,558.00 | \$797.78 | \$1,008.71 | \$1,558.00 | \$694.60 |
| 2001 | N/R | \$780.93 | \$1,072.41 | \$1,282.00 | \$681.70 | \$715.00 | \$848.76 | \$896.80 | \$1,282.00 | \$681.70 |
| 2002 Budgeted | N/R | N/R | \$1,126.03 | \$1,333.00 | \$915.46 | \$1,619.00 | \$746.20 | \$1,147.94 | \$1,619.00 | \$746.20 |
| 2003 Projected | N/R | N/R | \$1,182.33 | \$1,386.00 | \$852.07 | \$777.00 | \$824.48 | \$1,004.38 | \$1,386.00 | \$777.00 |
| % chn 00 to 01 | N/A | 12% | 7% | 10% | -18% | -54% | 6% | -6% | 12% | -54% |
| % chn 01 to 03 | N/A | N/A | 10% | 8% | 25% | 9% | -3% | 10% | 25% | -3% |

Fig. 29. Outpatient Hospital Emergency Services Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|--------|--------|-----------|--------|--------|--------|---------|--------|--------|
| 2000 | N/R | \$1.81 | \$3.18 | \$2.28 | \$1.74 | \$3.80 | \$1.91 | \$2.45 | \$3.80 | \$1.74 |
| 2001 | N/R | \$4.43 | \$3.78 | \$2.48 | \$1.95 | \$4.78 | \$2.16 | \$3.26 | \$4.78 | \$1.95 |
| 2002 Budgeted | N/R | \$5.14 | \$4.04 | \$2.64 | \$2.18 | \$4.11 | \$2.56 | \$3.45 | \$5.14 | \$2.18 |
| 2003 Projected | N/R | \$5.90 | \$4.33 | \$2.81 | \$2.86 | \$8.08 | \$3.04 | \$4.50 | \$8.08 | \$2.81 |
| % chn 00 to 01 | N/A | 145% | 19% | 9% | 12% | 26% | 13% | 37% | 145% | 9% |
| % chn 01 to 03 | N/A | 33% | 15% | 13% | 47% | 69% | 41% | 36% | 69% | 13% |

Fig. 30. Physician Services: Emergency Room Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|--------|--------|-----------|------|--------|--------|---------|--------|--------|
| 2000 | N/R | \$1.03 | \$0.36 | \$2.21 | N/R | \$1.42 | \$1.71 | \$1.35 | \$2.21 | \$0.36 |
| 2001 | N/R | \$1.28 | \$0.43 | \$2.54 | N/R | \$1.59 | \$1.85 | \$1.54 | \$2.54 | \$0.43 |
| 2002 Budgeted | N/R | \$1.48 | \$0.46 | \$3.14 | N/R | \$1.53 | \$2.18 | \$1.76 | \$3.14 | \$0.46 |
| 2003 Projected | N/R | \$1.70 | \$0.49 | \$3.68 | N/R | \$2.69 | \$2.76 | \$2.26 | \$3.68 | \$0.49 |
| % chn 00 to 01 | N/A | 24% | 19% | 15% | N/A | 12% | 8% | 16% | 24% | 8% |
| % chn 01 to 03 | N/A | 33% | 14% | 45% | N/A | 69% | 49% | 42% | 69% | 14% |

Fig. 31. Emergency Services: Visits per 1,000 Members

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|-------|--------|-----------|-------|--------|---------|---------|---------|------|
| 2000 | N/R | 191.7 | 73.1 | 189.8 | 200.3 | 188.7 | 200.3 | 174.0 | 200.3 | 73.1 |
| 2001 | N/R | 208.8 | 79.4 | 252.0 | 199.9 | 208.2 | 202.9 | 191.8 | 252.0 | 79.4 |
| 2002 Budgeted | N/R | N/R | 79.2 | 266.0 | 209.9 | 196.3 | 1,091.9 | 368.7 | 1,091.9 | 79.2 |
| 2003 Projected | N/R | N/R | 79.2 | 271.3 | 220.5 | 320.1 | 1,206.5 | 419.5 | 1,206.5 | 79.2 |
| % chn 00 to 01 | N/A | 9% | 9% | 33% | 0% | 10% | 1% | 10% | 33% | 0% |
| % chn 01 to 03 | N/A | N/A | 0% | 8% | 10% | 54% | 495% | 113% | 495% | 0% |

Fig. 32. Emergency Services: Facility Costs per encounter (excludes physician fees)

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|
| 2000 | N/R | \$113.06 | \$283.57 | \$207.00 | N/R | \$242.00 | \$114.43 | \$192.01 | \$283.57 | \$113.06 |
| 2001 | N/R | \$254.54 | \$306.47 | \$224.00 | \$116.98 | \$276.00 | \$128.06 | \$217.68 | \$306.47 | \$116.98 |
| 2002 Budgeted | N/R | N/R | \$321.79 | \$233.00 | \$114.66 | \$251.00 | \$52.08 | \$194.51 | \$321.79 | \$52.08 |
| 2003 Projected | N/R | N/R | \$337.88 | \$243.00 | \$146.21 | \$303.00 | \$57.55 | \$217.53 | \$337.88 | \$57.55 |
| % chn 00 to 01 | N/A | 125% | 8% | 8% | N/A | 14% | 12% | 33% | 125% | 8% |
| % chn 01 to 03 | N/A | N/A | 10% | 8% | 25% | 10% | -55% | 0% | 25% | -55% |

Fig. 33. Mental Health Visits per 1,000 Members

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|-------|--------|-----------|-------|--------|-------|---------|-------|-------|
| 2000 | N/R | 490.4 | 408.7 | 314.4 | 633.8 | 533.5 | 633.3 | 502.4 | 633.8 | 314.4 |
| 2001 | N/R | 452.2 | 358.0 | 341.9 | 603.3 | 548.0 | 653.6 | 492.8 | 653.6 | 341.9 |
| 2002 Budgeted | N/R | N/R | 357.0 | 379.6 | 633.7 | 645.6 | 707.3 | 544.6 | 707.3 | 357.0 |
| 2003 Projected | N/R | N/R | 357.0 | 398.5 | 670.2 | 604.1 | 781.5 | 562.3 | 781.5 | 357.0 |
| % chn 00 to 01 | N/A | -8% | -12% | 9% | -5% | 3% | 3% | -2% | 9% | -12% |
| % chn 01 to 03 | N/A | N/A | 0% | 17% | 11% | 10% | 20% | 11% | 20% | 0% |

Fig. 34. Substance Abuse Visits per 1,000 Members

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|-------|--------|-----------|------|--------|-------|---------|------|-----|
| 2000 | N/R | 17.3 | 16.6 | N/R | 6.0 | 19.4 | 6.3 | 13.1 | 19.4 | 6.0 |
| 2001 | N/R | 16.1 | 20.6 | N/R | 16.9 | 46.0 | 6.2 | 21.2 | 46.0 | 6.2 |
| 2002 Budgeted | N/R | N/R | 20.6 | N/R | 17.8 | 23.5 | 6.1 | 17.0 | 23.5 | 6.1 |
| 2003 Projected | N/R | N/R | 20.6 | N/R | 18.8 | 50.8 | 6.7 | 24.2 | 50.8 | 6.7 |
| % chn 00 to 01 | N/A | -7% | 24% | N/A | 180% | 137% | -2% | 67% | 180% | -7% |
| % chn 01 to 03 | N/A | N/A | 0% | N/A | 11% | 10% | 8% | 7% | 11% | 0% |

Fig. 35. Total Ambulatory Visits per 1,000 members

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|---------|---------|---------|-----------|---------|---------|----------|---------|----------|---------|
| 2000 | 5,225.1 | 4,479.8 | 7,137.7 | 1,057.3 | 5,800.5 | 4,329.0 | 7,912.7 | 5,134.6 | 7,912.7 | 1,057.3 |
| 2001 | 5,617.9 | 4,454.4 | 6,376.6 | 1,224.8 | 5,898.1 | 4,745.0 | 7,947.2 | 5,180.6 | 7,947.2 | 1,224.8 |
| 2002 Budgeted | 5,943.7 | N/R | 6,358.8 | 1,308.9 | 6,194.8 | 4,784.0 | 14,895.3 | 6,580.9 | 14,895.3 | 1,308.9 |
| 2003 Projected | N/R | N/R | 6,358.8 | 1,374.9 | 6,511.2 | 5,304.0 | 16,457.8 | 7,201.3 | 16,457.8 | 1,374.9 |
| % chn 00 to 01 | 8% | -1% | -11% | 16% | 2% | 10% | 0% | 3% | 16% | -11% |
| % chn 01 to 03 | N/A | N/A | 0% | 12% | 10% | 12% | 107% | 28% | 107% | 0% |

Fig. 36. Total Ambulatory Visit facility costs per encounter (excludes physician fees)

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|---------|----------|-----------|---------|----------|----------|----------|----------|---------|
| 2000 | N/R | \$74.69 | \$157.53 | N/R | \$70.32 | \$336.00 | \$130.21 | \$153.75 | \$336.00 | \$70.32 |
| 2001 | N/R | \$98.75 | \$152.97 | N/R | \$68.62 | \$153.00 | \$125.87 | \$119.84 | \$153.00 | \$68.62 |
| 2002 Budgeted | N/R | N/R | \$165.41 | N/R | \$77.28 | \$349.00 | \$40.15 | \$157.96 | \$349.00 | \$40.15 |
| 2003 Projected | N/R | N/R | \$173.68 | N/R | \$85.77 | \$171.00 | \$44.36 | \$118.70 | \$173.68 | \$44.36 |
| % chn 00 to 01 | N/A | 32% | -3% | N/A | -2% | -54% | -3% | -6% | 32% | -54% |
| % chn 01 to 03 | N/A | N/A | 14% | N/A | 25% | 12% | -65% | -4% | 25% | -65% |

Fig. 37. Total Physician Services (in and outpatient) Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|---------|
| 2000 | \$76.00 | \$42.92 | \$61.13 | \$69.53 | \$72.67 | \$57.68 | \$51.32 | \$61.61 | \$76.00 | \$42.92 |
| 2001 | \$84.09 | \$50.32 | \$62.19 | \$75.16 | \$77.99 | \$59.02 | \$55.39 | \$66.31 | \$84.09 | \$50.32 |
| 2002 Budgeted | \$93.83 | \$58.13 | \$66.54 | \$81.00 | \$85.69 | \$61.16 | \$63.52 | \$72.84 | \$93.83 | \$58.13 |
| 2003 Projected | N/R | \$66.39 | \$71.20 | \$86.72 | \$96.00 | \$74.76 | \$69.72 | \$77.47 | \$96.00 | \$66.39 |
| % chn 00 to 01 | 11% | 17% | 2% | 8% | 7% | 2% | 8% | 8% | 17% | 2% |
| % chn 01 to 03 | N/A | 32% | 14% | 15% | 23% | 27% | 26% | 23% | 32% | 14% |

Fig. 38. Incentive Pool/Withhold Adjustment Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|--------|--------|-----------|--------|--------|---------|---------|---------|--------|
| 2000 | N/R | \$2.73 | \$0.00 | N/R | \$0.00 | N/R | \$16.31 | \$4.76 | \$16.31 | \$0.00 |
| 2001 | N/R | \$1.17 | \$0.00 | N/R | \$0.00 | N/R | \$17.19 | \$4.59 | \$17.19 | \$0.00 |
| 2002 Budgeted | N/R | \$0.00 | \$0.00 | N/R | \$0.00 | N/R | \$19.88 | \$4.97 | \$19.88 | \$0.00 |
| 2003 Projected | N/R | \$0.00 | \$0.00 | N/R | \$0.00 | N/R | \$21.74 | \$5.44 | \$21.74 | \$0.00 |
| % chn 00 to 01 | N/A | -57% | 0% | N/A | 0% | N/A | 5% | -13% | 5% | -57% |
| % chn 01 to 03 | N/A | -100% | 0% | N/A | 0% | N/A | 26% | -18% | 26% | -100% |

Fig. 39. Total (Retail & Mail Order) Outpatient Prescription Drug Expenses PMPM

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|---------|
| 2000 | \$28.35 | \$23.08 | \$22.18 | \$28.29 | \$24.29 | \$22.82 | \$19.41 | \$24.06 | \$28.35 | \$19.41 |
| 2001 | \$31.36 | \$24.02 | \$24.81 | \$31.69 | \$26.06 | \$22.77 | \$21.77 | \$26.07 | \$31.69 | \$21.77 |
| 2002 Budgeted | \$35.00 | \$29.42 | \$28.78 | \$36.00 | \$32.34 | \$28.44 | \$26.91 | \$30.98 | \$36.00 | \$26.91 |
| 2003 Projected | N/R | \$36.04 | \$33.38 | \$40.04 | \$35.66 | \$35.24 | \$32.29 | \$35.44 | \$40.04 | \$32.29 |
| % chn 00 to 01 | 11% | 4% | 12% | 12% | 7% | 0% | 12% | 8% | 12% | 0% |
| % chn 01 to 03 | N/A | 50% | 35% | 26% | 37% | 55% | 48% | 42% | 55% | 26% |

Fig. 40. Total Retail Discounted Costs per Prescription per year

| | Aetna | CIGNA* | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|---------|---------|-----------|---------|---------|---------|---------|---------|---------|
| 2001 | N/R | \$51.59 | \$43.48 | N/R | \$49.49 | \$41.79 | \$44.88 | \$46.25 | \$51.59 | \$41.79 |
| 2002 Budgeted | N/R | \$51.59 | \$43.48 | N/R | \$55.17 | \$40.53 | \$54.53 | \$49.06 | \$55.17 | \$40.53 |
| 2003 Projected | N/R | \$51.59 | \$43.48 | N/R | \$58.57 | \$56.19 | N/R | \$52.46 | \$58.57 | \$43.48 |
| % chn 01 to 03 | N/A | 0% | 0% | N/A | 18% | 34% | N/A | \$0.13 | 34% | 0% |

*CIGNA's costs are AWP and not discounted

Fig. 41. Employee Copayments as a percent of Total Net Costs

| | Aetna | CIGNA | Fallon | Health NE | HPHC | N'Hood | Tufts | Average | Hi | Low |
|----------------|-------|-------|--------|-----------|------|--------|-------|---------|-----|------|
| 2001 | N/R | 28% | 19% | 23% | 24% | 21% | 26% | 24% | 28% | 19% |
| 2002 Budgeted | N/R | 28% | 19% | 23% | 22% | 22% | 25% | 23% | 28% | 19% |
| 2003 Projected | N/R | 28% | 19% | 23% | 21% | 15% | N/R | 21% | 28% | 15% |
| % chn 01 to 03 | N/A | 0% | 0% | 0% | -13% | -29% | N/A | -8% | 0% | -29% |